



CATALOGO
2010



Brocas, Rimas, Machuelos y
Cortadores Verticales y Circulares
Extractores, Buriles, Cuchillas para Tronzar

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HERRAMIENTAS CLEVELAND, S. A. de C. V.

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Lista 2001 Brocas Jobber Uso General Acero Alta Velocidad

CARACTERISTICAS

ESPECIFICACIONES ANSI	A.A.V.
DIN 338	BRILLANTE
USO GENERAL	EN-NEGRECIDO
ZANCO	38°
	118°

APLICACIONES

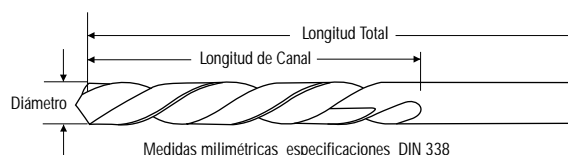
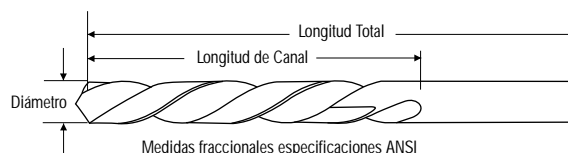
ACERO AL CARBÓN
FUNDICIÓN
ALUMINIO
ALEACIÓN DE COBRE



Lista 2001 Brillante



Lista 2001 Ennegrecido



Fracc.	Diámetro		Alfabética	Equivalencia		Long. Canal		Long. Total		Ennegrecido
	Num.	Milimétrica		mm	Decimal	Pulg.	mm	Pulg.	mm	
1/64"	80			0.34	0.0135	1/8	3.18	3/4	19.05	C01012
	79			0.36	0.0145	1/8	3.18	3/4	19.05	C01014
	78			0.39	0.0156	3/16	4.76	3/4	19.05	C01016
	77			0.40	0.0160	3/16	4.76	7/8	22.23	C01018
	76			0.45	0.0180	3/16	4.76	7/8	22.23	C01021
	75			0.50	0.0200	3/16	4.76	7/8	22.23	C01024
	74			0.53	0.0210	1/4	6.35	1	25.40	C01025
	73			0.57	0.0225	1/4	6.35	1	25.40	C01027
	72			0.60	0.0240	5/16	7.94	1-1/8	28.58	C01029
	71			0.63	0.0250	5/16	7.94	1-1/8	28.58	C01030
1/32	70			0.66	0.0260	3/8	9.53	1-1/4	31.75	C01032
	69			0.71	0.0280	3/8	9.53	1-1/4	31.75	C01034
	68			0.74	0.0292	1/2	12.70	1-3/8	34.93	C01035
	67			0.78	0.0310	1/2	12.70	1-3/8	34.93	C01037
	66			0.79	0.0312	1/2	12.70	1-3/8	34.93	C01038
	65			0.81	0.0320	1/2	12.70	1-3/8	34.93	C01040
	64			0.83	0.0330	1/2	12.70	1-3/8	34.93	C01041
	63			0.88	0.0350	5/8	15.88	1-1/2	38.10	C01043
	62			0.91	0.060	5/8	15.88	1-1/2	38.10	C01045
	61			0.93	0.0370	5/8	15.88	1-1/2	38.10	C01046
3/64"	60	1.00		0.96	0.0380	5/8	15.88	1-1/2	38.10	C01048
	59	1.05		0.99	0.0390	11/16	17.46	1-5/8	41.28	C01049
	58	1.10		1.00	0.0394	0.71	18.00	1.61	41.00	C01050
	57	1.15		1.02	0.0400	11/16	17.46	1-5/8	41.28	C01051
	56	1.20		1.04	0.0410	11/16	17.46	1-5/8	41.28	C01052
		1.25		1.05	0.0413	0.71	18.00	1.61	41.00	C01053
		1.30		1.07	0.0420	11/16	17.46	1-5/8	41.28	C01054
		1.35		1.09	0.0430	3/4	19.05	1-3/4	44.45	C01055
		1.40		1.10	0.0433	0.748	19.00	1.73	44.00	C01056
		1.45		1.15	0.0453	0.748	19.00	1.73	44.00	C01057

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Zanco Recto

Lista 2001 Brocas Jobber Uso General Acero Alta Velocidad (continuación)

Fracc.	Diámetro		Equivalencia		Long. Canal		Long. Total		Ennegrecido	
	Num.	Milimétrica	Alfabética	mm	Decimal	Pulg.	mm	Pulg.		mm
		1.20		1.20	0.0472	0.87	22.00	1.89	48.00	C01060
		1.25		1.25	0.0492	0.87	22.00	1.89	48.00	C01061
		1.30		1.30	0.0512	0.87	22.00	1.89	48.00	C01062
	55			1.32	0.0520	7/8	22.23	1-7/8	47.63	C01063
		1.35		1.35	0.0531	0.87	22.00	1.89	48.00	C01064
	54			1.40	0.0550	7/8	22.23	1-7/8	47.63	C01065
		1.40		1.40	0.0551	0.87	22.00	1.89	48.00	C01066
		1.45		1.45	0.0571	0.87	22.00	1.89	48.00	C01067
		1.50		1.50	0.0591	0.87	22.00	1.89	48.00	C01068
	53			1.51	0.0595	7/8	22.23	1-7/8	47.63	C01069
		1.55		1.55	0.0610	0.87	22.00	1.89	48.00	C01070
	1/16"			1.59	0.0625	7/8	22.23	1-7/8	47.63	C01071
		1.60		1.60	0.0630	0.87	22.00	1.89	48.00	C01072
	52			1.61	0.0635	7/8	22.23	1-7/8	47.63	C01073
		1.65		1.65	0.0650	0.98	25.00	2.01	51.00	C01074
		1.70		1.70	0.0669	0.98	25.00	2.01	51.00	C01075
	51			1.70	0.0670	1	25.40	2	50.80	C01076
		1.75		1.75	0.0689	0.98	25.00	2.01	51.00	C01077
	50			1.78	0.0700	1	25.40	2	50.80	C01078
		1.80		1.80	0.0709	0.98	25.00	2.01	51.00	C01079
		1.85		1.85	0.0729	0.98	25.00	2.01	51.00	C01080
	49			1.85	0.0730	1	25.40	2	50.80	C01081
		1.90		1.90	0.0748	0.98	25.00	2.01	51.00	C01082
	48			1.93	0.0760	1	25.40	2	50.80	C01083
		1.95		1.95	0.0768	0.98	25.00	2.01	51.00	C01084
	5/64"			1.98	0.0781	1	25.40	2	50.80	C01085
	47			1.99	0.0785	1	25.40	2	50.80	C01086
		2.00		2.00	0.0787	1.14	29.00	2.13	54.00	C01087
		2.05		2.05	0.0807	1.14	29.00	2.13	54.00	C01088
	46			2.06	0.0810	1-1/8	28.58	2-1/8	53.98	C01089
	45			2.08	0.0820	1-1/8	28.58	2-1/8	53.98	C01090
		2.10		2.10	0.0827	1.14	29.00	2.13	54.00	C01091
		2.15		2.15	0.0846	1.14	29.00	2.13	54.00	C01092
	44			2.18	0.0860	1-1/8	28.58	2-1/8	53.98	C01093
		2.20		2.20	0.0866	1.26	32.00	2.13	57.00	C01094
		2.25		2.25	0.0886	1.26	32.00	2.13	57.00	C01095
	43			2.26	0.0890	1-1/4	31.75	2-1/4	57.15	C01096
		2.30		2.30	0.0906	1.26	32.00	2.13	57.00	C01097
		2.35		2.35	0.0925	1.26	32.00	2.13	57.00	C01098
	42			2.37	0.0935	1-1/4	31.75	2-1/4	57.15	C01099
	3/32"			2.38	0.0938	1-1/4	31.75	2-1/4	57.15	C01100
		2.40		2.40	0.0945	1.38	35.00	2.36	60.00	C01101
	41			2.44	0.0960	1-3/8	34.93	2-3/8	60.33	C01102
		2.45		2.45	0.0965	1.38	35.00	2.36	60.00	C01103
	40			2.49	0.0980	1-3/8	34.93	2-3/8	60.33	C01104
		2.50		2.50	0.0984	1.38	35.00	2.36	60.00	C01105
	39			2.53	0.0995	1-3/8	34.93	2-3/8	60.33	C01106
	38			2.58	0.1015	1-7/8	36.51	2-1/2	63.50	C01107
		2.60		2.60	0.1024	1.46	37.00	2.52	64.00	C01108
	37			2.64	0.1040	1-7/16	36.51	2-1/2	63.50	C01109
		2.70		2.70	0.1063	1.46	37.00	2.52	64.00	C01110
	36			2.71	0.1065	1-7/16	36.51	2-1/2	63.50	C01111
		2.75		2.75	0.1083	1.30	33.00	2.40	61.00	C01112
	7/64			2.78	0.1094	1-1/2	38.10	2-5/8	66.68	C01113

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Lista 2001 Brocas Jobber Uso General Acero Alta Velocidad (continuación)

Fracc.	Diámetro		Equivalencia		Long. Canal		Long. Total		Ennegrecido	
	Num.	Milimétrica	Alfabética	mm	Decimal	Pulgs.	mm	Pulgs.		mm
1/8"	35			2.79	0.1100	1-1/2	38.10	2-5/8	66.68	C01114
		2.80		2.80	0.1102	1.50	38.00	2.64	67.00	C01115
	34			2.82	0.1110	1-1/2	38.10	2-5/8	66.68	C01116
	33			2.87	0.1130	1-1/2	38.10	2-5/8	66.68	C01117
		2.90		2.90	0.1142	1.61	41.00	2.76	70.00	C01118
	32			2.95	0.1180	1-5/8	41.28	2-3/4	69.85	C01119
		3.00		3.00	0.1181	1.61	41.00	2.76	70.00	C01120
	31			3.05	0.1200	1-5/8	41.28	2-3/4	69.85	C01121
		3.10		3.10	0.1220	1.61	41.00	2.76	70.00	C01122
				3.18	0.1250	1-5/8	41.28	2-3/4	69.85	C01123
9/64"		3.20		3.20	0.1260	1.61	41.00	2.76	70.00	C01124
		3.25		3.25	0.1280	1.61	41.00	2.76	70.00	C01125
	30			3.26	0.1285	1-5/8	41.28	2-3/4	69.85	C01126
		3.30		3.30	0.1299	1.77	45.00	2.87	73.00	C01127
		3.40		3.40	0.1339	1.77	45.00	2.87	73.00	C01128
	29			3.45	0.1360	1-3/4	44.45	2-7/8	73.03	C01129
		3.50		3.50	0.1378	1.77	45.00	2.87	73.00	C01130
	28			3.57	0.1405	1-3/4	44.45	2-7/8	73.03	C01131
				3.57	0.1406	1-3/4	44.45	2-7/8	73.03	C01132
		3.60		3.60	0.1417	1.89	48.00	2.99	76.00	C01133
5/32"	27			3.66	0.1440	1-7/8	47.63	3	76.20	C01134
		3.70		3.70	0.1457	1.89	48.00	2.99	76.00	C01135
	26			3.73	0.1470	1-7/8	47.63	3	76.20	C01136
		3.75		3.75	0.1476	1.89	48.00	2.99	76.00	C01137
	25			3.80	0.1495	1-7/8	47.63	3	76.20	C01138
		3.80		3.80	0.1496	2.01	51.00	2.99	79.00	C01139
	24			3.86	0.1520	2	50.80	3-1/8	79.38	C01140
		3.90		3.90	0.1535	2.01	51.00	3.11	79.00	C01141
	23			3.91	0.1540	2	50.80	3-1/8	79.38	C01142
				3.97	0.1562	2	50.80	3-1/8	79.38	C01143
11/64	22			3.98	0.1570	2	50.80	3-1/8	79.38	C01144
		4.00		4.00	0.1575	2.13	54.00	3.27	83.00	C01145
	21			4.04	0.1590	2-1/8	53.98	3-1/4	82.55	C01146
	20			4.09	0.1610	2-1/8	53.98	3-1/4	82.55	C01147
		4.10		4.10	0.1614	2.13	54.00	3.27	83.00	C01148
		4.20		4.20	0.1654	2.13	54.00	3.27	83.00	C01149
	19			4.22	0.1660	2-1/8	53.98	3-1/4	82.55	C01150
		4.25		4.25	0.1673	2.13	54.00	3.27	83.00	C01151
		4.30		4.30	0.1693	2.13	54.00	3.27	83.00	C01152
	18			4.31	0.1695	2-1/8	53.98	3-1/4	82.55	C01153
3/16"				4.37	0.1719	2-1/8	53.98	3-1/4	82.55	C01154
	17			4.39	0.1730	2-3/16	55.56	3-3/8	85.73	C01155
		4.40		4.40	0.1732	2.20	56.00	3.39	86.00	C01156
	16			4.50	0.1770	2-3/16	55.56	3-3/8	85.73	C01157
		4.50		4.50	0.1772	2.20	56.00	3.39	86.00	C01158
	15			4.57	0.1800	2-3/16	55.56	3-3/8	85.73	C01159
		4.60		4.60	0.1811	2.20	56.00	3.39	86.00	C01160
	14			4.62	0.1820	2-3/16	55.56	3-3/8	85.73	C01161
	13			4.70	0.1850	2-3/16	58.74	3-1/2	88.90	C01162
		4.70		4.70	0.1850	2.32	59.00	3.50	89.00	C01163
3/16"		4.75		4.75	0.1870	2.32	59.00	3.50	89.00	C01164
				4.76	0.1875	2-5/16	58.74	3-1/2	88.90	C01165
	12			4.80	0.1890	2-5/16	58.74	3-1/2	88.90	C01166
		4.80		4.80	0.1890	2.32	59.00	3.50	89.00	C01167

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Zanco Recto

Lista 2001 Brocas Jobber Uso General Acero Alta Velocidad (continuación)

Fracc.	Diámetro		Equivalencia		Long. Canal		Long. Total		Ennegrecido	
	Num.	Milimétrica	Alfabética	mm	Decimal	Pulg.	mm	Pulg.		mm
	11			4.85	0.1910	2-5/16	58.74	3-1/2	88.90	C01168
		4.90		4.90	0.1929	2.44	62.00	3.62	92.00	C01169
	10			4.91	0.1935	2-7/16	61.91	3-5/8	92.08	C01170
	9			4.98	0.1960	2-7/16	61.91	3-5/8	92.08	C01171
		5.00		5.00	0.1969	2.44	62.00	3.62	92.00	C01172
	8			5.05	0.1990	2-7/16	61.91	3-5/8	92.08	C01173
		5.10		5.10	0.2008	2.44	62.00	3.62	92.00	C01174
	7			5.11	0.2010	2-7/16	61.91	3-5/8	92.08	C01175
13/64"				5.16	0.2031	2-7/16	61.91	3-5/8	92.08	C01176
	6			5.18	0.2040	2-1/2	63.50	3-3/4	95.25	C01177
		5.20		5.20	0.2047	2.52	64.00	3.74	95.00	C01178
	5			5.22	0.2055	2-1/2	63.50	3-3/4	95.25	C01179
		5.25		5.25	0.2067	2.52	64.00	3.74	95.00	C01180
		5.30		5.30	0.2087	2.52	64.00	3.74	95.00	C01181
	4			5.31	0.2090	2-1/2	63.50	3-3/4	95.25	C01182
		5.40		5.40	0.2126	2.52	64.00	3.70	94.00	C01183
	3			5.41	0.2130	2-1/2	63.50	3-3/4	95.25	C01184
		5.50		5.50	0.2165	2.52	64.00	3.74	95.00	C01185
7/32"				5.56	0.2188	2-1/2	63.50	3-3/4	95.25	C01186
		5.60		5.60	0.2205	2.64	67.00	3.86	98.00	C01187
	2			5.61	0.2210	2-5/8	66.68	3-7/8	98.43	C01188
		5.70		5.70	0.2244	2.64	67.00	3.86	98.00	C01189
		5.75		5.75	0.2264	2.64	67.00	3.86	98.00	C01190
	1			5.79	0.2280	2-5/8	66.68	3-7/8	98.43	C01191
		5.80		5.80	0.2283	2.64	67.00	3.86	98.00	C01192
		5.90		5.90	0.2323	2.64	67.00	3.86	98.00	C01193
			A	5.94	0.2340	2-5/8	66.68	3-7/8	98.43	C01194
15/64"				5.95	0.2344	2-5/8	66.68	3-7/8	98.43	C01195
		6.00		6.00	0.2362	2.76	70.00	4.02	102.00	C01196
			B	6.05	0.2380	2-3/4	69.85	4	101.60	C01197
		6.10		6.10	0.2402	2.76	70.00	4.02	102.00	C01198
			C	6.15	0.2420	2-3/4	69.85	4	101.60	C01199
		6.20		6.20	0.2441	2.76	70.00	4.02	102.00	C01200
			D	6.25	0.2480	2-3/4	69.85	4	101.60	C01201
		6.25		6.25	0.2461	2.76	70.00	4.02	102.00	C01202
		6.30		6.30	0.2480	2.76	70.00	4.02	102.00	C01203
1/4"			E	6.35	0.2500	2-3/4	69.85	4	101.60	C01204
		6.40		6.40	0.2520	2.87	73.00	4.13	105.00	C01206
		6.50		6.50	0.2559	2.87	73.00	4.13	105.00	C01207
			F	6.53	0.2570	2-7/8	73.03	4-1/8	104.77	C01208
		6.60		6.60	0.2598	2.87	73.00	4.13	105.00	C01209
			G	6.63	0.2610	2-7/8	73.03	4-1/8	104.77	C01210
		6.70		6.70	0.2638	2.87	73.00	4.13	105.00	C01211
17/64"				6.75	0.2656	2-7/8	73.03	4-1/8	104.77	C01212
		6.75		6.75	0.2657	2.87	73.00	4.13	105.00	C01213
			H	6.76	0.2660	2-7/8	73.03	4-1/8	104.77	C01214
		6.80		6.80	0.2677	2.87	73.00	4.13	105.00	C01215
		6.90		6.90	0.2717	2.87	73.00	4.13	105.00	C01216
			I	6.91	0.2720	2-7/8	73.03	4-1/8	104.77	C01217
		7.00		7.00	0.2756	2.87	73.00	4.13	105.00	C01218
			J	7.04	0.2770	2-7/8	73.03	4-1/8	104.77	C01219
		7.10		7.10	0.2795	2.95	75.00	4.25	108.00	C01220
			K	7.14	0.2810	2-15/16	74.61	4-1/4	107.95	C01221
		7.20		7.20	0.2835	2.95	75.00	4.25	108.00	C01222

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Lista 2001 Brocas Jobber Uso General Acero Alta Velocidad (continuación)

Fracc.	Diámetro		Equivalencia		Long. Canal		Long. Total		Ennegrecido	
	Num.	Milimétrica	Alfabética	mm	Decimal	Pulg.	mm	Pulg.		mm
		7.25		7.25	0.2854	2.95	75.00	4.25	108.00	C01223
		7.30		7.30	0.2874	2.95	75.00	4.25	108.00	C01224
9/32"			L	7.37	0.2900	2-15/16	74.61	4-1/4	107.95	C01225
				7.14	0.2812	2-15/16	74.60	4-1/4	107.95	C01226
19/64"		7.40		7.40	0.2913	3.07	78.00	4.37	111.00	C01227
			M	7.49	0.2950	3-1/16	93.66	4-3/8	111.13	C01228
19/64"		7.50		7.50	0.2953	3.07	78.00	4.37	111.00	C01229
				7.54	0.2969	3-1/16	77.79	4-3/8	111.13	C01230
5/16"		7.60		7.60	0.2992	3.07	78.00	4.37	111.00	C01231
			N	7.67	0.3020	3-1/16	77.79	4-3/8	111.13	C01232
5/16"		7.70		7.70	0.3031	3.19	81.00	4.49	114.00	C01233
		7.75		7.75	0.3051	3.19	81.00	4.49	114.00	C01234
5/16"		7.80		7.80	0.3071	3.19	81.00	4.49	114.00	C01235
		7.90		7.90	0.3110	3.19	81.00	4.49	114.00	C01236
5/16"				7.94	0.3125	3-3/16	80.96	4-1/2	114.30	C01237
		8.00		8.00	0.3150	3.19	81.00	4.49	114.00	C01238
21/64"			O	8.03	0.3160	3-3/16	80.96	4-1/2	114.30	C01239
		8.10		8.10	0.3189	3.31	84.00	4.49	114.00	C01240
21/64"		8.20		8.20	0.3228	3.31	84.00	4.60	117.00	C01241
			P	8.20	0.3230	3-5/16	84.14	4-5/8	117.48	C01242
21/64"		8.25		8.25	0.3248	3.31	84.00	4.60	117.00	C01243
		8.30		8.30	0.3268	3.31	84.00	4.60	117.00	C01244
21/64"				8.33	0.3281	3-5/16	84.14	4-5/8	117.48	C01245
		8.40		8.40	0.3307	3.43	87.00	4.76	121.00	C01246
21/64"			Q	8.43	0.3320	3-7/16	87.31	4-3/4	120.65	C01247
		8.50		8.50	0.3346	3.43	87.00	4.76	121.00	C01248
21/64"		8.60		8.60	0.3386	3.43	87.00	4.76	121.00	C01249
			R	8.61	0.3390	3-7/16	87.31	4-3/4	120.65	C01250
11/32"		8.70		8.70	0.3425	3.43	87.00	4.76	121.00	C01251
				8.73	0.3438	3-7/16	87.31	4-3/4	120.65	C01252
11/32"		8.75		8.75	0.3449	3.43	87.00	4.76	121.00	C01253
		8.80		8.80	0.3465	3.50	89.00	4.88	124.00	C01254
11/32"			S	8.84	0.3480	3-1/2	88.90	4-7/8	123.83	C01255
		8.90		8.90	0.3504	3.50	89.00	4.88	124.00	C01256
11/32"		9.00		9.00	0.3543	3.50	89.00	4.88	124.00	C01257
			T	9.09	0.3580	3-1/2	88.90	4-7/8	123.83	C01258
23/64"		9.10		9.10	0.3583	3.50	89.00	4.88	124.00	C01259
				9.12	0.3594	3.19	81.00	4-29/32	125.00	C01260
23/64"		9.20		9.20	0.3622	3.62	92.00	4.99	127.00	C01261
		9.25		9.25	0.3642	3.62	92.00	4.99	127.00	C01262
23/64"		9.30		9.30	0.3661	3.62	92.00	4.99	127.00	C01263
			U	9.35	0.3680	3-5/8	92.08	5	127.00	C01264
3/8"		9.40		9.40	0.3701	3.62	92.00	4.99	127.00	C01265
		9.50		9.50	0.3740	3.62	92.00	4.99	127.00	C01266
3/8"				9.53	0.3750	3-5/8	92.08	5	127.00	C01267
			V	9.58	0.3770	3-5/8	92.08	5	127.00	C01268
3/8"		9.60		133	0.3780	3.74	95.00	5.12	130.00	C01269
		9.70		9.70	0.3819	3.74	95.00	5.12	130.00	C01270
3/8"		9.75		9.75	0.3839	3.74	95.00	5.12	130.00	C01271
		9.80		9.80	0.3858	3.74	95.00	5.12	130.00	C01272
3/8"			W	9.80	0.3860	3-3/4	95.25	5-1/8	130.18	C01273
		9.90		9.90	0.3898	3.74	95.00	5.12	130.00	C01274
25/64"				9.92	0.3906	3-3/4	95.25	5-1/8	130.18	C01275
		10.00		10.00	0.3937	3.74	95.00	5.12	130.00	C01276

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Zanco Recto

Lista 2001 Brocas Jobber Uso General Acero Alta Velocidad (continuación)

BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS

Frac.	Diámetro		Equivalencia		Long. Canal		Long. Total		Ennegrecido	
	Num.	Milimétrica	Alfabética	mm	Decimal	Pulgs.	mm	Pulgs.		mm
	10.20		X	10.08	0.3970	3-3/4	95.25	5-1/8	130.18	C01277
				10.20	0.4016	3.86	98.00	5.24	133.00	C01278
	10.30		Y	10.26	0.4040	3-7/8	98.43	5-1/4	133.35	C01279
				10.30	0.4055	3.86	98.00	5.24	133.00	C01280
13/32"			Z	10.32	0.4062	3-7/8	98.43	5-1/4	133.35	C01281
				10.49	0.4130	3-7/8	98.43	5-1/4	133.35	C01282
27/64"	10.50			10.50	0.4131	3.94	100.00	5.39	137.00	C01283
				10.72	0.4219	3-15/16	100.01	5-3/8	136.53	C01284
	10.80			10.80	0.4252	4.06	103.00	5.51	140.00	C01285
				11.00	0.4331	4.06	103.00	5.51	140.00	C01286
7/16"	11.20			11.11	0.4375	4-1/16	103.19	5-1/2	139.70	C01287
				11.20	0.4409	4.17	106.00	5.63	143.00	C01288
29/64"	11.50			11.50	0.4528	4.17	106.00	5.51	140.00	C01289
				11.51	0.4531	4-3/16	106.36	5-5/8	142.88	C01290
15/32"	11.80			11.80	0.4643	4.33	110.00	5.75	146.00	C01291
				11.91	0.4688	4-5/16	109.54	5-3/4	146.05	C01292
	12.00			12.00	0.4724	4.33	111.00	5.90	150.00	C01293
				12.20	0.4803	4.33	111.00	5.90	150.00	C01294
31/64"	12.50			12.30	0.4844	4-3/8	111.13	5-7/8	149.23	C01295
				12.50	0.4921	4.49	114.00	5.98	152.00	C01296
1/2"	13.00			12.70	0.5000	4-1/2	114.30	6	152.40	C01297
				13.00	0.5118	4.49	114.00	5.98	152.00	C01299
33/64"				13.10	0.5156	4-13/16	122.24	6-5/8	168.28	C01300
17/32"				13.49	0.5312	4-13/16	122.24	6-5/8	168.28	C01302
	13.50			13.50	0.5315	4.80	122.00	6.61	168.00	C01303
35/64"				13.89	0.5469	4-13/16	122.24	6-5/8	168.28	C01305
	14.00			14.00	0.5512	4.80	122.00	6.61	168.00	C01306
9/16"				14.29	0.5625	4-13/16	122.24	6-5/8	168.28	C01308
	14.50			14.50	0.5709	4.80	122.00	6.61	168.00	C01309
37/64"				14.68	0.5781	4-13/16	122.24	6-5/8	168.28	C01310
	15.00			15.00	0.5906	5.20	132.00	7.13	181.00	C01312
19/32"				15.08	0.5938	5-3/16	131.76	7-1/8	180.98	C01313
39/64"				15.48	0.6094	5-3/16	131.76	7-1/8	180.98	C01315
	15.50			15.50	0.6102	5.20	132.00	7.13	181.00	C01316
5/8"				15.88	0.6250	5-3/16	131.76	7-1/8	180.98	C01318
	16.00			16.00	0.6299	5.20	132.00	7.13	181.00	C01319
41/64"				16.27	0.6406	5-3/16	131.76	7-1/8	180.98	C01321
	16.50			16.50	0.6496	5.20	132.00	7.13	181.00	C01322
21/32"				16.67	0.6562	5-3/16	131.76	7-1/8	180.98	C01323
	17.00			17.00	0.6693	5.63	143.00	7.64	194.00	C01325
43/64"				17.07	0.6719	5-5/8	142.88	7-5/8	193.68	C01326
11/16"				17.46	0.6875	5-5/8	142.88	7-5/8	193.68	C01328
	17.50			17.50	0.6890	5.63	143.00	7.64	194.00	C01329

Juegos

Medidas	No. de Pzas.	Código
1/16 a 1/2 x 64avos	29	C00888
de 1mm a 13mm por 05mm	25	C00943



Zanco Reducido a 1/2"

Lista 936 Brocas Zanco Reducido a 1/2" Uso General Acero Alta Velocidad

CARACTERISTICAS

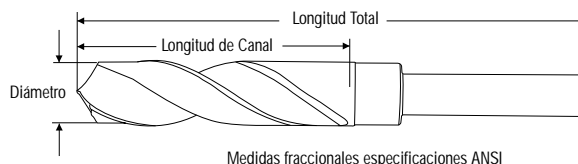
ESPECIFICACIONES ANSI	A.A.V.
USO GENERAL	EN-NEGRECIDO
ZANCO	38°
	118°

APLICACIONES

ACERO AL CARBÓN
ACERO ALEADO
FUNDICIÓN



Lista 936 Ennegrecido Zanco Reducido a 1/2"



Diámetro Fracc.	Equivalencia		Long. Canal		Long. Total		EDP Ennegrecido
	Decimal	mm	Pulg.	mm	Pulg.	mm	
33/64	0.5156	13.10	3-1/8	79.375	6	152.40	C11162
17/32	0.5312	13.49	3-1/8	79.375	6	152.40	C11164
9/16	0.5625	14.29	3-1/8	79.375	6	152.40	C11170
19/32	0.5938	15.08	3-1/8	79.375	6	152.40	C11175
5/8	0.6250	15.88	3-1/8	79.375	6	152.40	C11180
21/32	0.6562	16.67	3-1/8	79.375	6	152.40	C11185
11/16	0.6875	17.46	3-1/8	79.375	6	152.40	C11190
23/32	0.7188	18.26	3-1/8	79.375	6	152.40	C11194
3/4	0.7500	19.05	3-1/8	79.375	6	152.40	C11198
25/32	0.7812	19.84	3	76.19	6	152.40	C11201
13/16	0.8125	20.64	3	76.19	6	152.40	C11205
27/32	0.8438	21.43	3	76.19	6	152.40	C11208
7/8	0.8750	22.23	3	76.19	6	152.40	C11212
29/32	0.9062	23.02	3	76.19	6	152.40	C11216
15/16	0.9375	23.81	3	76.19	6	152.40	C11219
31/32	0.9688	24.61	3	76.19	6	152.40	C11223
1	1.0000	25.40	3	76.19	6	152.40	C11226
1-1/16	1.0625	26.99	3	76.19	6	152.40	C11233
1-1/8	1.1250	28.58	3	76.19	6	152.40	C11241
1-3/16	1.1875	30.16	3	76.19	6	152.40	C11248
1-1/4	1.2500	31.75	3	76.19	6	152.40	C11255

BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS



Zanco Recto

Lista 2213 Brocas Jobber Aircraft Acero Alta Velocidad al Cobalto

BROCAS

CARACTERISTICAS

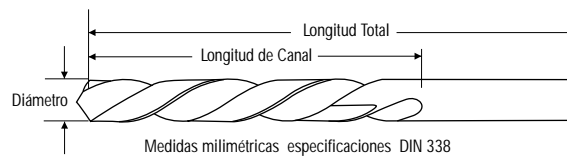
NAS 907 TYPE J	M42
TRABAJO PESADO	COLOR PAJA
ZANCO	135° SPLIT
	30°

APLICACIONES

ALEACIÓN DE COBRE	ACERO GRADO HERRAMIENTA
ALUMINIO	ACERO PARA DADOS
INCONEL	ACERO ESTRUCTURAL
ALEACIÓN DE TITANIO	INOXIDABLE PRECIPITADO ENDURECIDO



Lista 2213 Color Paja



RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS

Diámetro Fracc.	Equivalencia		Long. Canal		Long. Total		EDP
	Decimal	mm	Pulg.	mm	Pulg.	mm	
1/64	.0156	0.40	.188	4.76	.750	19.05	C70000
1/32	.0312	0.79	.500	12.70	1.375	34.93	C70001
3/64	.0469	1.19	.750	19.05	1.750	44.45	C70002
1/16	.0625	1.59	.875	22.23	1.875	47.63	C70003
5/64	.0781	1.98	1.000	25.40	2.000	50.80	C70004
3/32	.0938	2.38	1.250	31.75	2.250	57.12	C70005
7/64	.1094	2.78	1.500	38.10	2.625	66.68	C70006
1/8	.1250	3.18	1.625	41.28	2.750	69.85	C70007
9/64	.1406	3.57	1.750	44.45	2.875	73.03	C70008
5/32	.1562	3.97	2.000	50.80	3.125	79.38	C70009
11/64	.1719	4.37	2.125	53.98	3.250	82.55	C70010
3/16	.1875	4.76	2.313	58.74	3.500	88.90	C70011
13/64	.2031	5.16	2.438	61.91	3.625	92.08	C70012
7/32	.2205	5.56	2.500	63.50	3.750	95.25	C70013
15/64	.2344	5.95	2.625	66.68	3.875	98.43	C70014
1/4	.2500	6.35	2.750	69.85	4.000	101.60	C70015
17/64	.2656	6.75	2.875	73.03	4.125	104.78	C70016
9/32	.2812	7.14	2.938	74.61	4.250	107.95	C70017
19/64	.2969	7.54	3.063	77.79	4.375	111.13	C70018
5/16	.3125	7.94	3.188	80.96	4.500	114.30	C70019
21/64	.3281	8.33	3.313	84.14	4.625	117.48	C70020
11/32	.3438	8.73	3.438	87.31	4.750	120.65	C70021
23/64	.3594	9.13	3.500	88.90	4.875	123.93	C70022
3/8	.3750	9.53	3.625	92.80	5.000	127.00	C70023
25/64	.3906	9.92	3.750	95.25	5.125	130.18	C70024
13/32	.4063	10.32	3.875	98.43	5.250	133.35	C70025
27/64	.4219	10.72	3.938	100.01	5.375	136.53	C70026
7/16	.4375	11.11	4.063	103.19	5.500	139.70	C70027
29/64	.4531	11.51	4.188	106.36	5.625	142.88	C70028
15/32	.4688	11.91	4.313	109.54	5.750	146.05	C70029
31/64	.4844	12.30	4.375	111.12	5.875	149.23	C70030
1/2	.5000	12.70	4.500	114.30	6.000	152.40	C70031

Juegos

No. de Piezas	No. Lista	Acabado	Rango de Medidas	EDP
29	2213	oxido de paja	1/16" a 1/2" x 1/64"	C70365
26	2213	oxido de paja	de la letra A a la letra Z	C00986
60	2213	oxido de paja	calibre #1 a calibre#60	C70366
115	2213	oxido de paja	1/16" a 1/2" x 1/64" de la "A" a la "Z" y de calibre #1 a calibre #60	C70367



Lista 3722-6 Brocas Aircraft Acero Alta Velocidad al Cobalto 6"

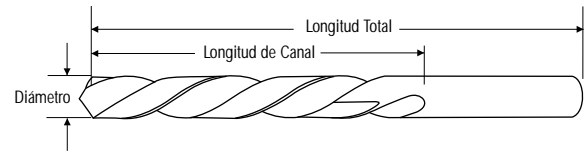
CARACTERISTICAS



APLICACIONES



Lista 3722-6 Color paja



Diámetro		Equivalencia		Long. Canal		Long. Total		EDP
Fracccionales	Numérica.	Decimal	mm	Pulg.	mm	Pulg.	mm	
1/8	40	.0980	2.49	1.375	34.93	6.000	152.40	C08144
		.1250	3.18	1.625	41.28	6.000	152.40	C08115
5/32	30	.1285	3.26	1.625	41.28	6.000	152.40	C08142
	27	.1440	3.66	1.875	47.63	6.000	152.40	C08140
		.1562	3.97	2.000	50.80	6.000	152.40	C08117
3/16	21	.1590	4.04	2.000	50.80	6.000	152.40	C08138
		.1610	4.09	2.125	53.98	6.000	152.40	C08137
	16	.1770	4.50	2.188	55.56	6.000	152.40	C08135
		.1850	4.70	2.313	58.74	6.000	152.40	C08134
7/32	13	.1875	4.76	2.313	58.74	6.000	152.40	C08119
		.1910	4.85	2.313	58.74	6.000	152.40	C08133
	11	.1935	4.91	2.438	61.91	6.000	152.40	C08132
1/4	10	.1990	5.05	2.438	61.91	6.000	152.40	C08130
		.2188	5.56	2.500	63.50	6.000	152.40	C08121
	8	.2500	6.35	2.750	69.85	6.000	152.40	C08123

BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS

Screw Machine

Lista 2120 Brocas Serie Corta Acero Alta Velocidad Uso General

BROCAS

CARACTERISTICAS

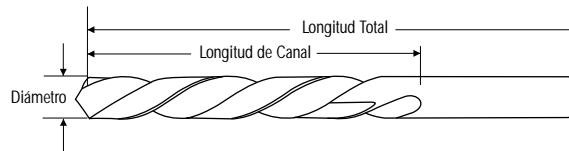
ESPECIFICACIONES ANSI A.A.V.
USO GENERAL BRILLANTE
ZANCO 118°
30°

APLICACIONES

ACERO ALEADO ALUMINIO
ACERO AL CARBON ALEACION DE COBRE
HIERRO FUNDIDO BRONCE



Lista 2120 Brillante



RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS

Fraccionales	Diámetro		Equivalencia		Long. Canal		Long. Total		EDP Ennegrecido
	Númerica.	Decimal	mm	mm	Pulg.	mm	Pulg.	mm	
	60	.0400	1.02	.500	12.70	1.375	34.93	C04356	
	59	.0410	1.04	.500	12.70	1.375	34.93	C04357	
	58	.0420	1.07	.500	12.70	1.375	34.93	C04359	
	57	.0430	1.09	.500	12.70	1.375	34.93	C04360	
3/64	56	.0465	1.18	.500	12.70	1.375	34.93	C04363	
		.0469	1.19	.500	12.70	1.375	34.93	C04364	
	55	.0520	1.32	.625	15.88	1.625	41.28	C04368	
	54	.0550	1.40	.625	15.88	1.625	41.28	C04370	
1/16	53	.0595	1.51	.625	15.88	1.625	41.28	C04374	
		.0625	1.59	.625	15.88	1.625	41.28	C04376	
	52	.0635	1.61	.688	17.46	1.688	42.86	C04378	
	51	.0670	1.70	.688	17.46	1.688	42.86	C04381	
	50	.0700	1.78	.688	17.46	1.688	42.86	C04383	
	49	.0730	1.85	.688	17.46	1.688	42.86	C04386	
5/64	48	.0760	1.93	.688	17.46	1.688	42.86	C04388	
		.0781	1.98	.688	17.46	1.688	42.86	C04390	
	47	.0785	1.99	.750	19.05	1.750	44.45	C04391	
	46	.0810	2.06	.750	19.05	1.750	44.45	C04394	
	45	.0820	2.08	.750	19.05	1.750	44.45	C04395	
	44	.0860	2.18	.750	19.05	1.750	44.45	C04398	
	43	.0890	2.26	.750	19.05	1.750	44.45	C04401	
	42	.0935	2.38	.750	19.05	1.750	44.45	C04404	
3/32		.0938	2.38	.750	19.05	1.750	44.45	C04405	
		.0960	2.44	.813	20.64	1.813	46.04	C04407	
	40	.0980	2.49	.813	20.64	1.813	46.04	C04409	
	39	.0995	2.53	.813	20.64	1.813	46.04	C04411	
	38	.1015	2.58	.813	20.64	1.813	46.04	C04412	
	37	.1040	2.64	.813	20.64	1.813	46.04	C04414	
7/64	36	.1065	2.71	.813	20.64	1.813	46.04	C04416	
		.1094	2.78	.813	20.64	1.813	46.04	C04418	
	35	.1100	2.79	.875	22.23	1.875	47.63	C04419	
	34	.1110	2.82	.875	22.23	1.875	47.63	C04421	
	33	.1130	2.87	.875	22.23	1.875	47.63	C04422	
	32	.1160	2.95	.875	22.23	1.875	47.63	C04424	
1/8	31	.1200	3.05	.875	22.23	1.875	47.63	C04426	
		.1250	3.18	.875	22.23	1.875	47.63	C04428	
	30	.1285	3.26	.938	23.81	1.938	49.21	C04431	
	29	.1360	3.45	.938	23.81	1.938	49.21	C04434	
9/64	28	.1405	3.57	.938	23.81	1.938	49.21	C04436	
		.1406	3.57	.938	23.81	1.938	49.21	C04437	
	27	.1440	3.66	1.000	25.40	2.063	52.39	C04439	
	26	.1470	3.73	1.000	25.40	2.063	52.39	C04441	
	25	.1495	3.80	1.000	25.40	2.063	52.39	C04443	
	24	.1520	3.86	1.000	25.40	2.063	52.39	C04445	

Continúa en la siguiente Página



Lista 2120 Brocas Serie Corta Acero Alta Velocidad Uso General (continuación)

Diámetro		Equivalencia		Long. Canal		Long. Total		EDP
Fraccionales	Númerica.	Decimal	mm	Pulg.	mm	Pulg.	mm	Ennegrecido
5/32	23	.1540	3.91	1.000	25.40	2.063	52.39	C04447
			.1562	3.97	1.000	25.40	2.063	C04448
	22	.1570	3.99	1.063	26.99	2.125	53.98	C04449
	21	.1590	4.04	1.063	26.99	2.125	53.98	C04451
11/64	20	.1610	4.09	1.063	26.99	2.125	53.98	C04452
	19	.1660	4.22	1.063	26.99	2.125	53.98	C04455
	18	.1695	4.31	1.063	26.99	2.125	53.98	C04458
			.1719	4.37	1.063	26.99	2.125	C04459
3/16	17	.1730	4.39	1.125	28.58	2.188	55.56	C04460
	16	.1770	4.50	1.125	28.58	2.188	55.56	C04462
	15	.1800	4.57	1.125	28.58	2.188	55.56	C04464
	14	.1820	4.62	1.125	28.58	2.188	55.56	C04466
13/64	13	.1850	4.70	1.125	28.58	2.188	55.56	C04467
			.1875	4.76	1.125	28.58	2.188	C04470
	12	.1890	4.80	1.188	30.16	2.250	57.15	C04471
	11	.1910	4.85	1.188	30.16	2.250	57.15	C04473
7/32	10	.1935	4.92	1.188	30.16	2.250	57.15	C04475
	9	.1960	4.98	1.188	30.16	2.250	57.15	C04476
	8	.1990	5.06	1.188	30.16	2.250	57.15	C04478
	7	.2010	5.11	1.188	30.16	2.250	57.15	C04480
13/64		.2031	5.16	1.188	30.16	2.250	57.15	C04481
	6	.2040	5.18	1.250	31.75	2.375	60.33	C04482
	5	.2055	5.22	1.250	31.75	2.375	60.33	C04484
	4	.2090	5.31	1.250	31.75	2.375	60.33	C04487
7/32	3	.2130	5.41	1.250	31.75	2.375	60.33	C04489
			.2188	5.56	1.250	31.75	2.375	C04491
	2	.2210	5.61	1.313	33.34	2.438	61.91	C04493
	1	.2280	5.79	1.313	33.34	2.438	61.91	C04496
15/64		.2344	5.95	1.313	33.34	2.438	61.91	C04500
1/4		.2500	6.35	1.375	34.93	2.500	63.50	C04509
17/64		.2656	6.75	1.438	36.51	2.625	66.68	C04517
9/32		.2812	7.14	1.500	38.10	2.688	68.26	C04531
19/64		.2969	7.54	1.563	39.69	2.750	69.85	C04535
5/16		.3125	7.94	1.625	41.28	2.813	71.44	C04542
21/64		.3281	8.33	1.688	42.86	2.938	74.61	C04550
11/32		.3438	8.73	1.688	42.96	3.000	76.20	C04557
23/64		.3594	9.13	1.750	44.45	3.063	77.79	C04565
3/8		.3750	9.53	1.813	46.04	3.125	79.38	C04572
25/64		.3906	9.92	1.875	47.63	3.250	82.55	C04580
13/32		.4062	10.32	1.938	49.21	3.313	84.14	C04585
27/64		.4219	10.72	2.000	50.80	3.375	85.73	C04588
7/16		.4375	11.11	2.063	52.39	3.438	87.31	C04591
29/64		.4531	11.51	2.125	53.98	3.563	90.49	C04594
15/32		.4688	11.91	2.125	53.98	3.625	92.08	C04596
31/64		.4844	12.30	2.188	55.56	3.688	93.66	C04599
1/2		.5000	12.70	2.250	57.15	3.750	95.25	C04601
33/64		.5156	13.10	2.375	60.33	3.875	98.43	C04604
17/32		.5312	13.49	2.375	60.33	3.875	98.43	C04606
35/64		.5469	13.89	2.500	63.50	4.000	101.60	C04609
9/16		.5625	14.29	2.500	63.50	4.000	101.60	C04612
37/64		.5781	14.68	2.625	66.68	4.125	104.78	C04614
19/32		.5938	15.08	2.625	66.68	4.125	104.78	C04617

Continúa en la siguiente Página

Lista 2120 Brocas Serie Corta Acero Alta Velocidad Uso General (continuación)

Fraccionales	Diámetro		Equivalencia		Long. Canal		Long. Total		EDP
	Numérica.	Decimal	mm	Pulgs.	mm	Pulgs.	mm	Ennegrecido	
39/64		.6094	15.48	2.750	69.85	4.250	107.95	C04619	
5/8		.6250	15.88	2.750	69.85	4.250	107.95	C04622	
41/64		.6406	16.27	2.875	73.03	4.500	114.30	C04625	
21/32		.6562	16.67	2.875	73.03	4.500	114.30	C04627	
43/64		.6719	17.07	2.875	73.03	4.625	117.48	C04630	
11/16		.6875	17.46	2.875	73.03	4.625	117.48	C04632	
45/64		.7031	17.86	3.000	76.20	4.750	120.65	C04634	
23/32		.7188	18.26	3.000	76.20	4.750	120.65	C04636	
47/64		.7344	18.65	3.125	79.38	5.000	127.00	C04638	
3/4		.7500	19.05	3.125	79.38	5.000	127.00	C04640	
49/64		.7656	19.45	3.250	82.55	5.125	130.18	C04641	
25/32		.7812	19.84	3.250	82.55	5.125	130.18	C04643	
51/64		.7969	20.24	3.375	85.73	5.250	133.35	C04645	
13/16		.8125	20.64	3.375	85.73	5.250	133.35	C04647	
53/64		.8281	21.03	3.500	88.90	5.375	136.53	C04649	
27/32		.8438	21.43	3.500	88.90	5.375	136.53	C04650	
55/64		.8594	21.83	3.500	88.90	5.500	139.70	C04652	
7/8		.8750	22.23	3.500	88.90	5.500	139.70	C04654	
57/64		.8906	22.62	3.625	92.08	5.625	142.88	C04656	
29/32		.9062	23.02	3.625	92.08	5.625	142.88	C04658	
59/64		.9219	23.42	3.750	95.25	5.750	146.05	C04559	
15/16		.9375	23.81	3.750	95.25	5.750	146.05	C04661	
61/64		.9531	24.21	3.875	98.43	5.875	149.23	C04663	
31/32		.9688	24.61	3.875	98.43	5.875	149.23	C04665	
63/64		.9844	25.00	4.000	101.60	6.000	152.40	C04667	
1		1.0000	25.40	4.000	101.60	6.000	152.40	C04668	
1-1/16		1.0625	26.99	4.000	101.60	6.250	158.75	C04675	
1-1/8		1.1250	28.58	4.000	101.60	6.375	161.93	C04683	
1-3/16		1.1875	30.16	4.250	107.95	6.625	168.28	C04690	
1-1/4		1.2500	31.75	4.375	111.13	6.750	171.45	C04697	
1-5/16		1.3125	33.34	4.375	111.13	7.000	177.80	C04704	
1-3/8		1.3750	34.93	4.500	114.30	7.125	180.98	C04711	
1-7/16		1.4375	36.51	4.750	120.65	7.375	187.33	C04719	
1-1/2		1.5000	38.10	4.875	123.83	7.500	190.50	C04726	
1-9/16		1.5625	39.69	4.875	123.83	7.750	196.85	C04733	
1-5/8		1.6250	41.28	4.875	123.83	7.750	196.85	C04740	
1-11/16		1.6875	42.86	5.125	130.18	8.000	203.20	C04747	
1-3/4		1.7500	44.45	5.125	130.18	8.000	203.20	C04754	

BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS
HERRAMIENTAS

Lista 2510 Brocas Serie Larga Uso General Alta Velocidad

CARACTERÍSTICAS

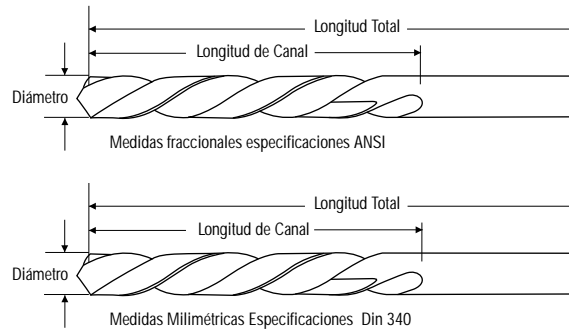
ESPECIFICACIONES ANSI	A.A.V.
DIN 340	EN-NEGRECIDO
USO GENERAL	38°
ZANCO	118°

APLICACIONES

ACERO AL CARBÓN
ACERO ALEADO
FUNDICIÓN



Lista 2510 Ennegrecido



Diámetro Fraccionales	Equivalencia		Long. Canal		Long. Total		EDP Ennegrecido
	Decimal	mm	Pulg.	mm	Pulg.	mm	
3/64	.0469	1.19	1-1/8	28.58	2-1/4	57.15	C08601
1/16	.0625	1.59	1-3/4	44.45	3	76.20	C08613
5/64	.0781	1.98	2	50.80	3 3/4	95.25	C08627
3/32	.0938	2.38	2-1/4	57.12	4 1/4	107.95	C08642
7/64	.1094	2.78	2-1/2	63.50	4 5/8	117.48	C08655
1/8	.1250	3.18	2-3/4	69.85	5 1/8	130.18	C08665
9/64	.1406	3.57	3	76.20	5 3/8	136.53	C08674
5/32	.1562	3.97	3	76.20	5 3/8	136.53	C08685
11/64	.1719	4.37	3-3/8	85.73	5 3/4	146.05	C08696
3/16	.1875	4.76	3-3/8	85.73	5 3/4	146.05	C08707
13/64	.2031	5.16	3-5/8	92.08	6	152.40	C08718
7/32	.2188	5.56	3-5/8	92.08	6	152.40	C08728
15/64	.2344	5.95	3-3/4	95.25	6 1/8	155.58	C08737
1/4	.2500	6.35	3-3/4	95.25	6 1/8	155.58	C08746
17/64	.2656	6.75	3-7/8	98.43	6 1/4	158.75	C08752
9/32	.2812	7.14	3-7/8	98.43	6 1/4	158.75	C08766
19/64	.2969	7.54	4	101.60	6 3/8	161.93	C08770
5/16	.3125	7.94	4	101.60	6 3/8	161.93	C08777
21/64	.3281	8.33	4-1/8	104.78	6 1/2	165.10	C08785
11/32	.3438	8.73	4-1/8	104.78	6 1/2	165.10	C08792
23/64	.3594	9.13	4-1/4	107.95	6 3/4	171.45	C08800
3/8	.3750	9.53	4-1/4	107.95	6 3/4	171.45	C08807
25/64	.3906	9.92	4-3/8	111.13	7	177.80	C08815
13/32	.4062	10.32	4-3/8	111.13	7	177.80	C08821
27/64	.4219	10.72	4-5/8	117.48	7 1/4	184.15	C08824
7/16	.4375	11.11	4-5/8	117.48	7 1/4	184.15	C08827
29/64	.4531	11.51	4-3/4	120.65	7 1/2	190.50	C08830
15/32	.4688	11.91	4-3/4	120.65	7 1/2	190.50	C08832
31/64	.4844	12.30	4-3/4	120.65	7 3/4	196.85	C08835
1/2	.5000	12.70	4-3/4	120.65	7 3/4	196.85	C08837
33/64	.5156	13.10	4-3/4	120.65	8	203.20	C08840
17/32	.5312	13.49	4-3/4	120.65	8	203.20	C08842
35/64	.5469	13.89	4-7/8	123.83	8 1/4	209.55	C08845
9/16	.5625	14.29	4-7/8	123.83	8/14	209.55	C08848



BROCAS
 RIMAS
 MACHUELOS
 CORTADORES
 OTRAS HERRAMIENTAS

Zanco Largo

Lista 2510 Brocas Serie Larga Uso General Alta Velocidad (continuación)

Diámetro Fraccionales	Equivalencia		Long. Canal		Long. Total		EDP Ennegrecido
	Decimal	mm	Pulg.	mm	Pulg.	mm	
37/64	.5781	14.68	4-7/8	123.83	8 3/4 ₁	222.25	C08850
19/32	.5938	15.08	4-7/8	123.83	8 3/4 ₁	222.25	C08853
39/64	.6094	15.48	4-7/8	123.83	8 3/4 ₁	222.25	C08855
5/8	.6250	15.88	4-7/8	123.83	8 3/4 ₁	222.25	C08858
41/64	.6406	16.27	5-1/8	130.18	9 1	228.60	C08861
21/32	.6562	16.67	5-1/8	130.18	9 1	228.60	C08863
43/64	.6719	17.07	5-3/8	136.53	9 1/4 ₁	234.95	C08866
11/16	.6875	17.46	5-3/8	136.53	9 1/4 ₁	234.95	C08868
45/64	.7031	17.86	5-5/8	142.88	9 1/2 ₁	241.30	C08870
23/32	.7188	18.26	5-5/8	142.88	9 1/2 ₁	241.30	C08872
47/64	.7344	18.65	5-7/8	149.23	9 3/4 ₁	247.65	C08874
3/4	.7500	19.05	5-7/8	149.23	9 3/4 ₁	247.65	C08876
49/64	.7656	19.45	6	152.40	9 7/8 ₁	250.83	C08877
25/32	.7812	19.84	6	152.40	9 7/8 ₁	250.83	C08879
51/64	.7969	20.24	6-1/8	155.58	10 1	254.00	C08881
13/16	.8125	20.64	6-1/8	155.58	10 1	254.00	C08883
53/64	.8281	21.03	6-1/8	155.58	10 1	254.00	C08885
27/32	.8438	21.43	6-1/8	155.58	10 1	254.00	C08886
55/64	.8594	21.83	6-1/8	155.58	10 1	254.00	C08888
7/8	.8750	22.23	6-1/8	155.58	10 1	254.00	C08890
57/64	.8906	22.62	6-1/8	155.58	10 1	254.00	C08892
29/32	.9062	23.02	6-1/8	155.58	10 1	254.00	C08894
59/64	.9219	23.42	6-1/8	155.58	10 3/4 ₁	273.05	C08895
15/16	.9375	23.81	6-1/8	155.58	10 3/4 ₁	273.05	C08897
61/64	.9531	24.21	6-3/8	161.93	11 1	279.40	C08899
31/32	.9688	24.61	6-3/8	161.93	11 1	279.40	C08901
63/64	.9844	25.00	6-3/8	161.93	11 1	279.40	C08903
1	1.0000	25.40	6-3/8	161.93	11 1	279.40	C08904
1-1/64	1.0156	25.80	6-1/2	165.10	11 1/8 ₁	282.58	C08906
1-1/32	1.0312	26.19	6-1/2	165.10	11 1/8 ₁	282.58	C08908
1-3/64	1.0469	26.59	6-5/8	168.28	11 1/4 ₁	285.75	C08910
1-1/16	1.0625	26.99	6-5/8	168.28	11 1/4 ₁	285.75	C08911
1-1/8	1.1250	28.58	7-1/8	180.98	11 3/4 ₁	298.45	C08919
1-1/4	1.2500	31.75	7-7/8	200.03	12-1/2 ₁	317.50	C08933

BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS



Lista 2520 Brocas Zanco Automotriz Uso General Acero Alta Velocidad

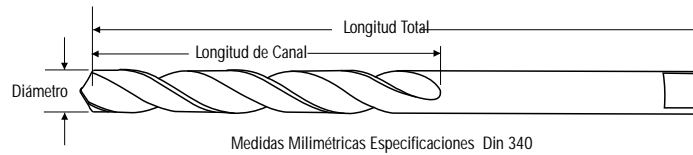
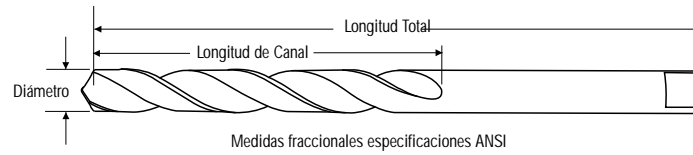
CARACTERÍSTICAS



APLICACIONES



Lista 2520 Ennegrecido Serie Larga



Diámetro Fraccionales	Equivalencia		Long. Canal		Long. Total		EDP Ennegrecido
	Decimal	mm	Pulg.	mm	Pulg.	mm	
1/8	.1250	3.18	2-3/4	69.85	5 1/8	130.18	C08423
9/64	.1406	3.57	3	76.20	5 3/8	136.53	C08429
5/32	.1562	3.97	3	76.20	5 3/8	136.53	C08435
11/64	.1719	4.37	3-3/8	85.73	5 3/4	146.05	C08441
3/16	.1875	4.76	3-3/8	85.73	5 3/4	146.05	C08447
13/64	.2031	5.16	3-5/8	92.08	6	152.40	C08452
7/32	.2188	5.56	3-5/8	92.08	6	152.40	C08458
15/64	.2344	5.95	3-3/4	95.25	6 1/8	155.58	C08464
1/4	.2500	6.35	3-3/4	95.25	6 1/8	155.58	C08470
17/64	.2656	6.75	3-7/8	98.43	6 1/4	158.75	C08475
9/32	.2812	7.14	3-7/8	98.43	6 1/4	158.75	C08484
19/64	.2969	7.54	4	101.60	6 3/8	161.93	C08487
5/16	.3125	7.94	4	101.60	6 3/8	161.93	C08493
21/64	.3281	8.33	4-1/8	104.78	6 1/2	165.10	C08499
11/32	.3438	8.73	4-1/8	104.78	6 1/2	165.10	C08504
23/64	.3594	9.13	4-1/4	107.95	6 3/4	171.45	C08510
3/8	.3750	9.53	4-1/4	107.95	6 3/4	171.45	C08516
25/64	.3906	9.92	4-3/8	111.13	7	177.80	C08522
13/32	.4062	10.32	4-3/8	111.13	7	177.80	C08525
27/64	.4219	10.72	4-5/8	117.48	7 1/4	184.15	C08527
7/16	.4375	11.11	4-5/8	117.48	7 1/4	184.15	C08530
29/64	.4531	11.51	4-3/4	120.65	7 1/2	190.50	C08533
15/32	.4688	11.91	4-3/4	120.65	7 1/2	190.50	C08535
31/64	.4844	12.30	4-3/4	120.65	7 3/4	196.85	C08538
1/2	.5000	12.70	4-3/4	120.65	7 3/4	196.85	C08540
33/64	.5156	13.10	4-3/4	120.65	8	203.20	C08543
17/32	.5312	13.49	4-3/4	120.65	8	203.20	C08545
35/64	.5469	13.89	4-7/8	123.83	8 1/4	209.55	C08548
9/16	.5625	14.29	4-7/8	123.83	8 1/4	209.55	C08551
37/64	.5781	14.68	4-7/8	123.83	8 3/4	222.25	C08553
19/32	.5938	15.08	4-7/8	123.83	8 3/4	222.25	C08556
39/64	.6094	15.48	4-7/8	123.83	8 3/4	222.25	C08558
5/8	.6250	15.88	4-7/8	123.83	8 3/4	222.25	C08561
41/64	.6406	16.27	5-1/8	130.18	9	228.60	C08564
21/32	.6562	16.67	5-1/8	130.18	9	228.60	C08566
43/64	.6719	17.07	5-3/8	136.53	9 1/4	234.95	C08569
11/16	.6875	17.46	5-3/8	136.53	9 1/4	234.95	C08571



BROCAS
 RIMAS
 MACHUELOS
 CORTADORES
 OTRAS HERRAMIENTAS

Zanco Recto

Lista 2550 Brocas Serie Larga Acero Alta Velocidad Hélice Alta

BROCAS

CARACTERÍSTICAS

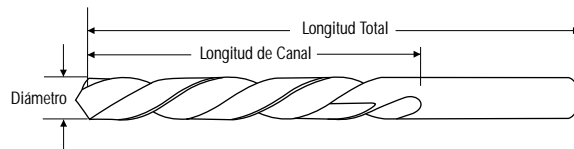
ESPECIFICACIONES ANSI	A.A.V.
USO GENERAL	BRILLANTE
ZANCO	118°
	38°

APLICACIONES

ACERO ALEADO
ALUMINIO
ALEACIÓN DE COBRE
PLASTICO



Lista 2550 Brillante



RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS

Diámetro Fraccionales	Equivalencia		Long. Canal		Long. Total		EDP Ennegrecido
	Decimal	mm	Pulg.	mm	Pulg.	mm	
1/32	.0312	0.79	.750	19.05	1.625	41.28	C09060
3/64	.0469	1.19	1.125	28.58	2.250	57.15	C09070
1/16	.0625	1.59	1.750	44.45	3.000	76.20	C09082
5/64	.0781	1.98	2.000	50.80	3.750	95.25	C09096
3/32	.0938	2.38	2.250	57.15	4.250	107.95	C09111
7/64	.1094	2.78	2.500	63.50	4.625	117.48	C09124
1/8	.1250	3.18	2.750	69.85	5.125	130.18	C09134
9/64	.1406	3.57	3.000	76.20	5.375	136.53	C09143
5/32	.1562	3.97	3.000	76.20	5.375	136.53	C09154
11/64	.1719	4.37	3.375	85.73	5.750	146.05	C09165
3/16	.1875	4.76	3.375	85.73	5.750	146.05	C09176
13/64	.2031	5.16	3.625	92.08	6.000	152.40	C09187
7/32	.2188	5.56	3.625	92.08	6.000	152.40	C09197
15/64	.2344	5.95	3.750	95.25	6.125	155.58	C09205
1/4	.2500	6.35	3.750	95.25	6.125	155.58	C09211
17/64	.2656	6.75	3.875	98.43	6.250	158.75	C09216
9/32	.2812	7.14	3.875	98.43	6.250	158.75	C09225
19/64	.2969	7.54	4.000	101.60	6.375	161.93	C09228
5/16	.3125	7.94	4.000	101.60	6.375	161.93	C09234
21/64	.3281	8.33	4.125	104.78	6.500	165.10	C09240
11/32	.3438	8.73	4.125	104.78	6.500	165.10	C09245
23/64	.3594	9.13	4.250	107.95	6.750	171.45	C09291
3/8	.3750	9.53	4.250	107.95	6.750	171.45	C09257
13/32	.4062	10.32	4.375	111.13	7.000	177.80	C09266
7/16	.4375	11.11	4.625	117.48	7.250	184.15	C09271
15/32	.4688	11.91	4.750	120.65	7.750	196.85	C09276
1/2	.5000	12.70	4.750	120.65	7.750	196.85	C09281



Lista 950 E Brocas Extra Larga Uso General Acero Alta Velocidad

CARACTERISTICAS

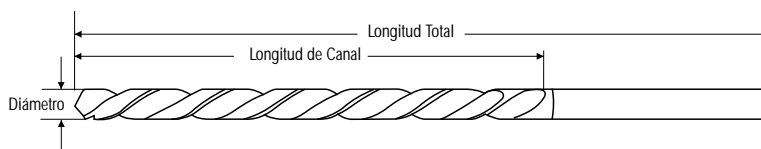
ESPECIFICACIONES ANSI: A.A.V.
 USO GENERAL: EN-NEGRECIDO
 ZANCO: 118° y 30°

APLICACIONES

ACERO AL CARBÓN
 ACERO GRADO HERRAMIENTA
 FUNDICIÓN



Lista 950 E Ennegrecido



Medidas fraccionales especificaciones ANSI

Diám. Fracc	Equivalencia Dec.	mm	Long. Canal Pulgs.	mm	Long. Total Pulgs.	mm	EDP Ennegrecido
3/32	.0938	2.38	5.500	139.70	8	203.20	C09655
7/64	.1094	2.78	5.500	139.70	8	203.20	C09656
1/8	.1250	3.18	5.500	139.70	8	203.20	C09657
1/8	.1250	3.18	7.500	190.50	10	254.00	C09707
1/8	.1250	3.18	9.000	228.60	12	304.80	C09736
9/64	.1406	3.57	5.500	139.70	8	203.20	C09658
5/32	.1562	3.97	5.500	139.70	8	203.20	C09659
5/32	.1562	3.97	7.500	190.50	10	254.00	C09709
5/32	.1562	3.97	9.000	228.60	12	304.80	C09738
11/64	.1719	4.37	5.500	139.70	8	203.20	C09660
3/16	.1875	4.76	5.500	139.70	8	203.20	C09661
3/16	.1875	4.76	7.500	190.50	10	254.00	C09711
3/16	.1875	4.76	9.000	228.60	12	304.80	C09740
13/64	.2031	5.16	5.500	139.70	8	203.20	C09662
7/32	.2188	5.56	5.500	139.70	8	203.20	C09663
7/32	.2188	5.56	7.500	190.50	10	254.00	C09713
7/32	.2188	5.56	9.000	228.60	12	304.80	C09742
15/64	.2344	5.95	5.500	139.70	8	203.20	C09664
15/64	.2344	5.95	7.500	190.50	10	254.00	C09714
1/4	.2500	6.35	5.500	139.70	8	203.20	C09665
1/4	.2500	6.35	7.500	190.50	10	254.00	C09715
1/4	.2500	6.35	9.000	228.60	12	304.80	C09744
1/4	.2500	6.35	14.000	355.60	18	457.20	C09831
17/64	.2656	6.75	5.500	139.70	8	203.20	C09666
9/32	.2812	7.14	5.500	139.70	8	203.20	C09667
9/32	.2812	7.14	7.500	190.50	10	254.00	C09717
9/32	.2812	7.14	9.000	228.60	12	304.80	C09746
9/32	.2812	7.14	14.000	355.60	18	457.20	C09833
19/64	.2969	7.54	5.500	139.70	8	203.20	C09668
5/16	.3125	7.94	5.500	139.70	8	203.20	C09669
5/16	.3125	7.94	7.500	190.50	10	254.00	C09719
5/16	.3125	7.94	9.000	228.60	12	304.80	C09748
5/16	.3125	7.94	14.000	355.60	18	457.20	C09835
21/64	.3281	8.33	5.500	139.70	8	203.20	C09670
11/32	.3438	8.73	5.500	139.70	8	203.20	C09671
11/32	.3438	8.73	7.500	190.50	10	254.00	C09721
11/32	.3438	8.73	9.000	228.60	12	304.80	C09750
11/32	.3438	8.73	14.000	355.60	18	457.20	C09837

Diám. Fracc	Equivalencia Dec.	mm	Long. Canal Pulgs.	mm	Long. Total Pulgs.	mm	EDP Ennegrecido
23/64	.3594	9.13	5.500	139.70	8	203.20	C09672
3/8	.3750	9.53	5.500	139.70	8	203.20	C09673
3/8	.3750	9.53	7.500	190.50	10	254.00	C09723
3/8	.3750	9.53	9.000	228.60	12	304.80	C09752
3/8	.3750	9.53	14.000	355.60	18	547.20	C09839
25/64	.3906	9.92	5.500	139.70	8	203.20	C09674
13/32	.4062	10.32	5.500	139.70	8	203.20	C09675
13/32	.4062	10.32	7.500	190.50	10	254.00	C09725
13/32	.4062	10.32	9.000	228.60	12	304.80	C09754
13/32	.4062	10.32	14.000	355.60	18	457.20	C09841
27/64	.4219	10.72	5.500	139.70	8	203.20	C09676
7/16	.4375	11.11	5.500	139.70	8	203.20	C09677
7/16	.4375	11.11	7.500	190.50	10	254.00	C09727
7/16	.4375	11.11	9.000	228.60	12	304.80	C09756
7/16	.4375	11.11	14.000	355.60	18	457.20	C09843
29/64	.4531	11.51	5.500	139.70	8	203.20	C09678
15/32	.4688	11.91	5.500	139.70	8	203.20	C09679
15/32	.4688	11.91	7.500	190.50	10	254.00	C09729
15/32	.4688	11.91	9.000	228.50	12	304.80	C09758
15/32	.4688	11.91	14.000	355.60	18	547.20	C09845
31/64	.4844	12.30	5.500	139.70	8	203.20	C09680
1/2	.5000	12.70	5.500	139.70	8	203.20	C09681
1/2	.5000	12.70	7.500	190.50	10	254.00	C09731
1/2	.5000	12.70	9.000	228.60	12	304.80	C09760
1/2	.5000	12.70	14.000	355.60	18	547.20	C09847
17/32	.5312	13.49	7.500	190.50	10	254.00	C09733
17/32	.5312	13.49	9.000	228.60	12	304.80	C09762
9/16	.5625	14.29	7.500	190.50	10	254.00	C09735
9/16	.5625	14.29	9.000	228.60	12	304.80	C09764
19/32	.5938	15.08	9.000	228.60	12	304.80	C09766
5/8	.6250	15.88	9.000	228.60	12	304.80	C09768
21/32	.6562	16.67	9.000	228.60	12	304.80	C09770
11/16	.6875	17.46	9.000	228.60	12	304.80	C09772
23/32	.7188	18.26	9.000	228.60	12	304.80	C09774
3/4	.7500	19.05	9.000	228.60	12	304.80	C09776



BROCAS
RIMAS
MACHUELOS
CORTADORES
OTRAS HERRAMIENTAS

Zanco Cónico

Lista 2410 Brocas Zanco Cónico Uso General Acero Alta Velocidad

BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS

CARACTERISTICAS

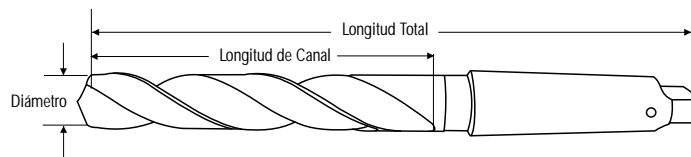
ESPECIFICACIONES ANSI	A.A.V.
USO GENERAL	EN-NEGRECIDO
ZANCO	38°
	118°

APLICACIONES

ACERO AL CARBÓN
ACERO SIN ALEACIÓN
FUNDICIÓN



Lista 2410 Ennegrecido Serie Larga



Medidas fraccionales especificaciones ANSI

Diámetro Fraccionales	Equivalencia Decimal	mm	Long. Canal Pulgs.	mm	Long. Total Pulgs.	mm	Cono Morse	EDP Ennegrecido
1/8	.1250	3.18	1-7/8	47.63	5-1/8	130.18	1	C12040
5/32	.1562	3.97	2-1/8	53.98	5-3/8	136.53	1	C12052
11/64	.1719	4.37	2-1/2	63.50	5-3/4	146.05	1	C12058
3/16	.1875	4.76	2-1/2	63.50	5-3/4	146.05	1	C12064
13/64	.2031	5.16	2-3/4	69.85	6	152.40	1	C12069
7/32	.2188	5.56	2-3/4	69.85	6	152.40	1	C12075
15/64	.2344	5.95	2-7/8	73.03	6-1/8	155.58	1	C12082
1/4	.2500	6.35	2-7/8	73.03	6-1/8	155.58	1	C12091
17/64	.2656	6.75	3	76.20	6-1/4	158.75	1	C12099
9/32	.2812	7.14	3	76.20	6-1/4	158.75	1	C12113
19/64	.2969	7.54	3-1/8	79.38	6-3/8	161.93	1	C12117
5/16	.3125	7.94	3-1/8	79.38	6-3/8	161.93	1	C12124
21/64	.3281	8.33	3-1/4	82.55	6-1/2	165.10	1	C12132
11/32	.3438	8.73	3-1/4	82.55	6-1/2	165.10	1	C12139
23/64	.3954	9.13	3-1/2	88.90	6-3/4	171.45	1	C12147
3/8	.3750	9.53	3-1/2	88.90	6-3/4	171.45	1	C12154
25/64	.3906	9.92	3-5/8	92.08	7	177.80	1	C12162
13/32	.4062	10.32	3-5/8	92.08	7	177.80	1	C12167
27/64	.4219	10.72	3-7/8	98.43	7-1/4	184.15	1	C12170
7/16	.4375	11.11	3-7/8	98.43	7-1/4	184.15	1	C12173
29/64	.4531	11.51	4-1/8	104.78	7-1/2	190.50	1	C12176
15/32	.4688	11.91	4-1/8	104.78	7-1/2	190.50	1	C12178
31/64	.4844	12.30	4-3/8	111.13	8-1/4	209.55	2	C12181
1/2	.5000	12.70	4-3/8	111.13	8-1/4	209.55	2	C12183
33/64	.5156	13.10	4-5/8	117.48	8-1/2	215.90	2	C12186
17/32	.5312	13.49	4-5/8	117.48	8-1/2	215.90	2	C12188
35/64	.5469	13.89	4-7/8	123.83	8-3/4	222.25	2	C12191
9/16	.5625	14.29	4-7/8	123.83	8-3/4	222.25	2	C12194
37/64	.5781	14.68	4-7/8	123.83	8-3/4	222.25	2	C12196
19/32	.5938	15.08	4-7/8	123.83	8-3/4	222.25	2	C12199
39/64	.6094	15.48	4-7/8	123.83	8-3/4	222.25	2	C12201
5/8	.6250	15.88	4-7/8	123.83	8-3/4	222.25	2	C12204
41/64	.6406	16.27	5-1/8	130.18	9	228.60	2	C12207
21/32	.6562	16.67	5-1/8	130.18	9	228.60	2	C12209
43/64	.6719	17.07	5-3/8	136.53	9-1/4	234.95	2	C12212
11/16	.6875	17.46	5-3/8	136.53	9-1/4	234.95	2	C12214
45/64	.7031	17.86	5-5/8	142.88	9-1/2	241.30	2	C12216
23/32	.7188	18.26	5-5/8	142.88	9-1/2	241.30	2	C12218

Continúa en la siguiente Página



Lista 2410 Brocas Zanco Cónico Uso General Acero Alta Velocidad (continuación)

Diámetro Fraccionales	Equivalencia		Long. Canal		Long. Total		Cono Morse	EDP Ennegrecido
	Decimal	mm	Pulg.	mm	Pulg.	mm		
47/64	.7344	18.65	5-7/8	149.23	9-3/4	247.65	2	C12220
3/4	.7500	19.05	5-7/8	149.23	9-3/4	247.65	2	C12222
49/64	.7656	18.45	6	152.40	9-7/8	250.83	2	C12223
25/32	.7812	19.84	6	152.40	9-7/8	250.83	2	C12225
51/64	.7969	20.24	6-1/8	155.58	10-3/4	273.05	3	C12227
13/16	.8125	20.64	6-1/8	155.58	10-3/4	273.05	3	C12229
53/64	.8281	21.03	6-1/8	155.58	10-3/4	273.05	3	C12231
27/32	.8438	21.43	6-1/8	155.58	10-3/4	273.05	3	C12232
55/64	.8594	21.88	6-1/8	155.58	10-3/4	273.05	3	C12234
7/8	.8750	22.23	6-1/8	155.58	10-3/4	273.05	3	C12236
57/64	.89.6	22.62	6-1/8	155.58	10-3/4	273.05	3	C12238
29/32	.9062	23.02	6-1/8	155.58	10-3/4	273.05	3	C12240
59/64	.9219	23.42	6-1/8	155.58	10-3/4	273.05	3	C12241
15/16	.9375	23.81	6-1/8	155.58	10-3/4	273.05	3	C12243
61/64	.9531	24.21	6-3/8	161.93	11	279.40	3	C12245
31/32	.9688	24.61	6-3/8	161.93	11	279.40	3	C12247
63/64	.9844	25.00	6-3/8	161.93	11	279.40	3	C12249
1	1.0000	25.40	6-3/8	161.93	11	279.40	3	C12250
1-1/64	1.0156	25.80	6-1/2	165.10	11-1/8	282.58	3	C12252
1-1/32	1.0312	26.19	6-1/2	165.10	11-1/8	282.58	3	C12254
1-3/64	1.0469	26.59	6-5/8	168.28	11-1/4	285.75	3	C12256
1-1/16	1.0625	26.99	6-5/8	168.28	11-1/4	285.75	3	C12257
1-5/64	1.0781	27.38	6-7/8	174.63	12-1/2	317.50	4	C12259
1-3/32	1.0938	27.78	6-7/8	174.63	12-1/2	317.50	4	C12261
1-7/64	1.1094	28.18	7-1/8	180.98	12-3/4	323.85	4	C12263
1-1/8	1.1250	28.58	7-1/8	180.98	12-3/4	323.85	4	C12265
1-9/64	1.1406	28.97	7-1/4	184.15	12-7/8	327.03	4	C12266
1-5/32	1.1562	29.37	7-1/4	184.15	12-7/8	327.03	4	C12268
1-11/64	1.1719	29.77	7-3/8	187.33	13	330.20	4	C12270
1-3/16	1.1875	30.16	7-3/8	187.33	13	330.20	4	C12272
1-13/64	1.2031	30.16	7-1/2	190.50	13-1/8	333.38	4	C12274
1-7/32	1.2188	30.96	7-1/2	190.50	13-1/8	333.38	4	C12275
1-15/64	1.2344	31.35	7-7/8	200.03	13-1/2	342.90	4	C12277
1-1/4	1.2500	31.75	7-7/8	200.03	13-1/2	342.90	4	C12279
1-17/64	1.2656	32.15	8-1/2	215.90	14-1/8	358.78	4	C12281
1-9/32	1.2812	32.54	8-1/2	215.90	14-1/8	358.78	4	C12283
1-19/64	1.2969	32.94	8-5/8	219.08	14-1/4	361.95	4	C12284
1-5/16	1.3125	33.34	8-5/8	218.08	14-1/4	361.95	4	C12286
1-21/64	1.3281	33.73	8-3/4	222.25	14-3/8	365.13	4	C12288
1-11/32	1.3438	34.13	8-3/4	222.25	14-3/8	365.13	4	C12290
1-23/64	1.3594	34.53	8-7/8	225.43	14-1/2	368.30	4	C12292
1-3/8	1.3750	34.93	8-7/8	225.43	14-1/2	368.30	4	C12293
1-25/64	1.3906	35.32	9	228.60	14-5/8	371.48	4	C12295
1-13/32	1.4062	35.72	9	228.60	14-5/8	371.48	4	C12297
1-27/64	1.4219	36.12	9-1/8	231.78	14-3/4	374.65	4	C12299
1-7/16	1.4375	36.51	9-1/8	231.78	14-3/4	374.65	4	C12301
1-29/64	1.4531	36.91	9-1/4	234.95	14-7/8	377.83	4	C12302
1-15/32	1.4688	37.31	9-1/4	234.95	14-7/8	377.83	4	C12304
1-1/2	1.5000	38.10	9-3/8	238.13	15	381.00	4	C12308
1-17/32	1.5312	38.89	9-3/8	238.13	16-3/8	415.92	5	C12311
1-9/16	1.5625	39.69	9-5/8	244.48	16-5/8	422.28	5	C12315
1-5/8	1.6250	41.28	10	254.00	17	431.80	5	C12322
1-11/16	1.6875	42.86	10-1/8	257.18	17-1/8	434.98	5	C12329
1-23/32	4.7188	43.66	10-1/8	257.18	17-1/8	434.98	5	C12333

Continúa en la siguiente Página

Zanco Cónico

Lista 2410 Brocas Zanco Cónico Uso General Acero Alta Velocidad (continuación)

Diámetro Fraccionales	Equivalencia		Long. Canal		Long. Total		Cono Morse	EDP Ennegrecido
	Decimal	mm	Pulg.	mm	Pulg.	mm		
1-3/4	1.7500	44.45	10-1/8	257.18	17-1/8	434.98	5	C12336
1-25/32	1.7812	45.24	10-1/8	257.18	17-1/8	434.98	5	C12340
1-13/16	1.8125	46.04	10-1/8	257.18	17-1/8	434.98	5	C12344
1-7/8	1.8750	47.63	10-3/8	263.53	17-3/8	441.33	5	C12351
1-15/16	1.9375	49.21	10-3/8	263.53	17-3/8	441.33	5	C12358
2	2.0000	50.80	10-3/8	263.53	17-3/8	441.33	5	C12365
2-1/8	2.1250	53.98	10-3/8	260.35	17-3/8	441.33	5	C12376
2-1/4	2.2500	57.15	10-1/4	257.18	17-3/8	441.33	5	C12388
2-5/16	2.3125	58.74	10-1/4	257.18	17-3/8	441.33	5	C12393
2-3/8	2.3750	60.33	10-1/4	257.18	17-3/8	441.33	5	C12399
2-1/2	2.5000	63.50	11-1/4	285.75	18-3/4	476.25	5	C12410

Lista 2440 Cobalto Brocas Zanco Cónico Uso General Acero Alta Velocidad

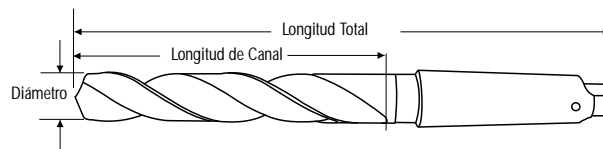
CARACTERÍSTICAS

ESPECIFICACIONES ANSI	A.A.V.	ACERO AL CARBÓN
USO GENERAL	COLOR OXIDO	ACERO SIN ALEACIÓN
ZANCO	135° MOD	ACERO INOXIDABLE
	30°	HIERRO FUNDIDO

APLICACIONES



Lista 2440 Color Oxido



Diámetro Fraccionales	Equivalencia		Long. Canal		Long. Total		Cono Morse	EDP Ennegrecido
	Decimal	mm	Pulg.	mm	Pulg.	mm		
1/4	.2500	6.35	2.875	73.03	6.125	155.58	1	C12705
5/16	.3125	7.94	3.125	79.38	6.375	161.93	1	C12728
11/32	.3438	8.73	3.250	82.55	6.500	165.10	1	C12739
3/8	.3750	9.53	3.500	88.90	6.750	171.45	1	C12751
13/32	.4062	10.32	3.625	92.08	7.000	177.80	1	C12760
7/16	.4375	11.11	3.875	98.43	7.250	184.15	1	C12765
15/32	.4688	11.91	4.125	104.78	7.500	190.50	1	C12770
1/2	.5000	12.70	4.375	111.13	8.250	209.55	2	C12775
17/32	.5312	13.49	4.625	117.48	8.500	215.90	2	C12780
9/16	.5625	14.29	4.875	123.83	8.750	222.25	2	C12786
19/32	.5938	15.08	4.875	123.83	8.750	222.25	2	C12791
5/8	.6250	15.88	4.875	123.83	8.750	222.25	2	C12796
21/32	.6562	16.67	5.125	130.18	9.000	228.60	3	C12801
11/16	.6875	17.46	5.375	136.53	9.250	234.95	3	C12806
23/32	.7188	18.26	5.625	142.88	9.500	241.30	3	C12810
3/4	.7500	19.05	5.875	149.23	9.750	247.65	3	C12814
25/32	.7812	19.84	6.000	152.40	9.875	250.83	3	C12817
13/16	.8125	20.64	6.125	155.58	10.750	273.05	3	C12821
7/8	.8750	22.23	6.125	155.58	10.750	273.05	3	C12828
15/16	.9375	23.81	6.125	155.58	10.750	273.05	3	C12835
1	1.0000	25.40	6.375	161.93	11.000	279.40	3	C12842



BROCAS

RIMAS

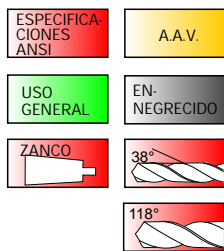
MACHUELOS

CORTADORES

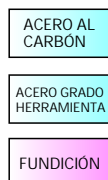
OTRAS HERRAMIENTAS

Lista 940-E Brocas Extralarga Zanco Cónico Uso General Acero Alta Velocidad

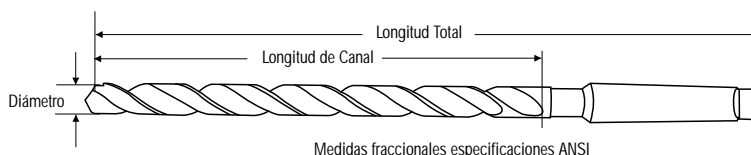
CARACTERISTICAS



APLICACIONES



Lista 940-E Ennegrecido Serie Extralarga



Diám. Fracc	Equivalencia Dec.	Long. Canal mm	Long. Canal Pulgs.	Long. Total mm	Long. Total Pulgs.	Cono Morse	EDP Ennegrecido
1/4	.2500	6.35	6	152.40	9-1/4	234.95	1 C13795
1/4	.2500	6.35	10	254.00	13-1/4	336.55	1 C13873
1/4	.2500	6.35	12	304.80	15-1/4	387.35	1 C13926
5/16	.3125	7.94	6	152.40	9-1/4	234.95	1 C13799
5/16	.3125	7.94	10	254.00	13-1/4	336.55	1 C13877
5/16	.3125	7.94	12	304.80	15-1/4	387.35	1 C13930
11/32	.3438	8.73	6	152.40	9-1/4	234.95	1 C13801
11/32	.3438	8.73	12	304.80	15-1/4	387.35	1 C13932
23/64	.3594	9.13	6	152.40	9-1/4	234.95	1 C13802
3/8	.3750	9.53	6	152.40	9-1/4	234.95	1 C13803
3/8	.3750	9.53	10	254.00	13-1/4	336.55	1 C13881
3/8	.3750	9.53	12	304.80	15-1/4	387.35	1 C13934
13/32	.4062	10.32	6	152.40	9-3/8	238.13	1 C13805
13/32	.4062	10.32	12	304.80	15-1/4	387.35	1 C13936
27/64	.4219	10.72	6	152.40	9-3/8	238.13	1 C13806
7/16	.4375	11.11	6	152.40	9-3/8	238.13	1 C13807
7/16	.4375	11.11	10	254.00	13-3/8	339.73	1 C13885
7/16	.4375	11.11	12	304.80	15-1/4	387.35	1 C13938
15/32	.4688	11.91	6	152.40	9-3/8	238.13	1 C13809
31/64	.4844	12.30	8	203.20	11-7/8	301.63	2 C13830
1/2	.5000	12.70	8	203.20	11-7/8	301.63	2 C13831
1/2	.5000	12.70	10	254.00	13-7/8	352.43	2 C13889
1/2	.5000	12.70	12	304.80	15-7/8	403.23	2 C13942
33/64	.5156	13.10	8	203.20	11-7/8	301.63	2 C13832
17/32	.5312	13.49	8	203.20	11-7/8	301.63	2 C13833
17/32	.5312	13.49	12	304.80	15-7/8	403.23	2 C13944
35/64	.5469	13.89	8	203.20	11-7/8	301.63	2 C13834
9/16	.5625	14.29	8	203.20	11-7/8	301.63	2 C13835
9/16	.5625	14.29	10	254.00	13-7/8	352.43	2 C13893
9/16	.5625	14.29	12	304.80	15-7/8	403.23	2 C13846
37/64	.5781	14.68	8	203.20	11-7/8	301.63	2 C13836
19/32	.5938	15.08	8	203.20	11-7/8	301.63	2 C13837
19/32	.5938	15.08	12	304.80	15-7/8	403.23	2 C13948
5/8	.6250	15.88	8	203.20	11-7/8	301.63	2 C13839
5/8	.6250	15.88	10	254.00	13-7/8	352.43	2 C13897
5/8	.6250	15.88	12	304.80	15-7/8	403.23	2 C13950
41/64	.6406	16.27	8	203.20	11-7/8	301.63	2 C13840
21/32	.6562	16.67	8	203.20	11-7/8	301.63	2 C13841

Diám. Fracc	Equivalencia Dec.	Long. Canal mm	Long. Canal Pulgs.	Long. Total mm	Long. Total Pulgs.	Cono Morse	EDP Ennegrecido
21/32	.6562	16.67	10	254.00	13-7/8	352.43	2 C13899
21/32	.6562	16.67	12	304.80	15-7/8	403.23	2 C13952
43/64	.6719	17.07	8	203.20	11-7/8	301.63	2 C13842
11/16	.6875	17.46	8	203.20	11-7/8	301.63	2 C13843
11/16	.6875	17.46	10	254.00	13-7/8	352.43	2 C13901
11/16	.6875	17.46	12	304.80	15-7/8	403.23	2 C13954
45/64	.7031	17.86	8	203.20	11-7/8	301.63	2 C13844
23/32	.7188	18.26	8	203.20	11-7/8	301.63	2 C13845
23/32	.7188	18.26	10	254.00	13-7/8	352.43	2 C13903
3/4	.7500	19.05	8	203.20	11-7/8	301.63	2 C13847
3/4	.7500	19.05	10	254.00	13-7/8	352.43	2 C13905
3/4	.7500	19.05	12	304.80	15-7/8	403.23	2 C13958
49/64	.7656	19.45	8	203.20	11-7/8	301.63	2 C13848
25/32	.7812	19.84	8	203.20	11-7/8	301.63	2 C13849
25/32	.7812	19.84	10	254.00	13-7/8	352.43	2 C13907
13/16	.8125	20.64	10	254.00	14-1/2	368.30	3 C13909
13/16	.8125	20.64	12	304.80	16-1/2	419.10	3 C13962
7/8	.8750	22.23	10	254.00	14-1/2	368.30	3 C13913
7/8	.8750	22.23	12	304.80	16-1/2	419.10	3 C13966
15/16	.9375	23.81	10	254.00	14-1/2	368.30	3 C13917
15/16	.9375	23.81	12	304.80	16-1/2	419.10	3 C13970
1	1.0000	25.40	10	254.00	14-1/2	368.30	3 C13921
1	1.0000	25.40	12	304.80	16-1/2	419.10	3 C13974
1-1/32	.0312	26.19	10	254.00	14-1/2	368.30	3 C13923
1-1/16	.0625	26.99	10	254.00	14-1/2	368.30	3 C13925
1-1/8	1.1250	28.58	12	304.80	17-1/2	444.50	4 C13982
1-5/32	1.5625	29.37	12	304.80	17-1/2	444.50	4 C13984
1-3/16	1.1875	30.16	12	304.80	17-1/2	444.50	4 C13986
1-1/4	1.2500	31.75	12	304.80	17-1/2	444.50	4 C13990

BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS



Lista 610 Avellanador Acero Alta Velocidad de Cuatro Canales

BROCAS

CARACTERISTICAS

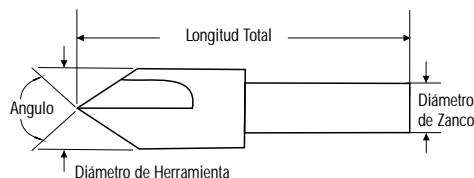
ESPECIFICACIONES ANSI
A.A.V.
USO GENERAL
ENNEGRECIDO
ZANCO

APLICACIONES

ACERO ALEADO GRADO HERRAMIENTA
HIERRO FUNDIDO



Lista 610 Ennegrecida



RIMAS

Diám. Fracc.	Equivalente Decimal	Equivalente mm	Diám. de Zanco Pulgs.	Diám. de Zanco mm	Longitud Total Pulgs.	Longitud Total mm	Ángulo de 60°	Ángulo de 82°	Ángulo de 90°	Ángulo de 100°
1/4	.2500	6.35	.188	6.35	1.438	36.51	C46198	C46199	C46200	C46201
3/8	.3750	9.53	.250	9.53	1.656	42.07	C46204	C46205	C46206	C46207
1/2	.5000	12.70	.375	12.70	1.844	46.83	C46210	C46211	C46212	C46213
5/8	.6250	15.88	.375	15.88	2.094	53.18	C46216	C46217	C46218	C46219
3/4	.7500	19.05	.500	19.05	2.406	61.12	C46222	C46223	C46224	C46225

MACHUELOS

Lista 1003 Avellanador Acero Alta Velocidad de Tres Canales

CARACTERISTICAS

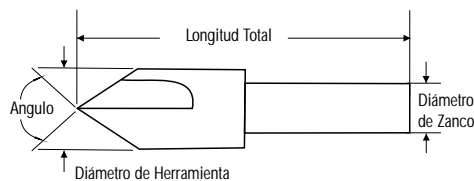
ESPECIFICACIONES ANSI
SUSTRATO
USO GENERAL
ENNEGRECIDO
ZANCO

APLICACIONES

ACERO AL CARBÓN
HIERRO FUNDIDO



Lista 1003 Tres Canales



CORTADORES

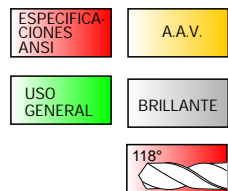
Diám. Fracc.	Equivalente Decimal	Equivalente mm	Diám. de Zanco Pulgs.	Diám. de Zanco mm	Longitud Total Pulgs.	Longitud Total mm	Ángulo de 60°	Ángulo de 82°	Ángulo de 90°	Ángulo de 100°	Ángulo de 120°
1/4	.2500	6.35	.188	4.76	1.500	38.10	C46150	C46151	C46152	C46153	C46155
3/8	.3750	9.53	.250	6.35	1.750	44.45	C46156	C46157	C46158	C46159	C46161
1/2	.5000	12.70	.250	6.35	2.000	50.80	C46162	C46163	C46164	C46165	C46167
5/8	.6250	15.88	.375	9.53	2.250	57.15	C46168	C46169	C46170	C46171	C46173
3/4	.7500	19.05	.375	9.53	2.625	66.68	C46174	C46175	C46176	C46177	C46179
1	1.0000	25.40	.500	12.70	3.125	79.38	C46180	C46181	C46182	C46183	C46185
1-1/4	1.2500	31.75	.500	12.70	3.969	100.81	C46186	C46187	C45188	-	-
1-1/2	1.5000	38.10	.500	12.70	4.313	109.54	C46189	C46190	C46191	-	-
2	2.0000	50.80	.500	12.70	5.000	127.00	C46192	-	-	-	-

OTRAS HERRAMIENTAS

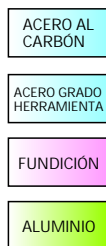


Lista 996, 998 Brocas para Centros Tipo Plana y Tipo Campana

CARACTERISTICAS



APLICACIONES



Lista 998 Tipo Plana



Lista 996 Tipo Campana

BROCAS

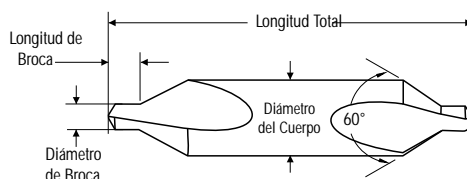
RIMAS

MACHUELOS

CORTADORES

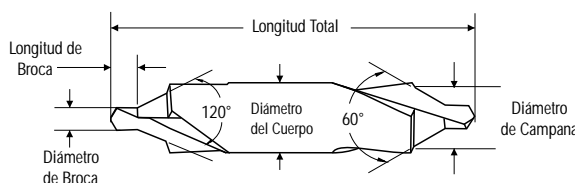
OTRAS HERRAMIENTAS

Lista 998 Plana



Medida Núm.	Diám. de Broca			Diám. del Cuerpo		Long. de Broca		Long. Total		EDP Brillante
	Pulg.	Decimal	mm	Pulg.	mm	Pulg.	mm	Pulg.	mm	
#00	.025	.0250	0.64	3/32	2.38	.030	0.76	1-1/8	28.58	C46261
#0	1/32	.0312	0.79	3/32	2.38	.038	0.97	1-1/8	28.58	C46262
#1	3/64	.0469	1.19	1/8	3.18	3/64	1.19	1-1/4	31.75	C46263
#2	5/64	.0781	1.98	3/16	4.76	1/16	1.98	1-7/8	47.63	C46264
#3	7/64	.1094	2.78	1/4	6.35	3/32	2.78	2	50.80	C46265
#4	1/8	.1250	3.18	5/16	7.94	7/64	3.18	2-1/8	53.98	C46266
#5	3/16	.1875	4.76	7/16	11.11	5/32	4.76	2-3/4	69.85	C46267
#6	7/32	.2188	5.56	1/2	12.70	3/16	5.56	3	76.20	C46268
#7	1/4	.2500	6.35	5/8	15.88	7/32	6.35	3-1/4	82.55	C46269
#8	5/16	.3125	7.94	3/4	19.05	1/4	7.94	3-1/2	88.90	C46270

Lista 996 Tipo Campana



Medida Núm.	Diám. de Broca			Diám. del Cuerpo		Long. de Broca		Long. Total		Diám. Campana		EDP Brillante
	Pulg.	Decimal	mm	Pulg.	mm	Pulg.	mm	Pulg.	mm	Pulg.	mm	
#11	3/64	.0469	1.19	1/8	3.18	3/64	1.19	1-1/4	31.75	.100	2054	C46272
#12	1/16	.0625	1.59	3/16	4.76	1/16	1.59	1-7/8	47.63	.150	3.81	C46273
#13	3/32	.0938	2.38	1/4	6.35	3/32	2.38	2	50.80	.200	5.08	C46274
#14	7/64	.1094	2.78	5/16	7.94	7/64	2.78	2-1/8	53.98	.250	6.35	C46275
#15	5/32	.1562	3.97	7/16	11.11	5/32	3.97	2-3/4	69.85	.350	8.89	C46276
#16	3/16	.1875	4.76	1/2	12.70	3/16	4.76	3	76.20	.400	10.16	C46277
#17	7/32	.2188	5.56	5/8	15.88	7/32	5.56	3-1/4	82.55	.500	12.70	C08678
#18	1/4	.2500	6.35	3/4	19.05	1/4	6.35	3-1/2	88.90	.600	15.24	C46279



RIMAS

Lista 4001 Rimas para Máquina Zanco Recto Canales Rectos

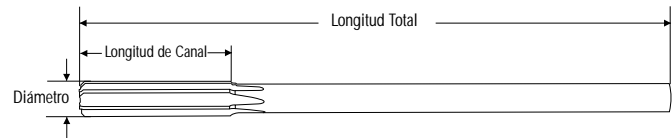
CARACTERÍSTICAS



APLICACIONES



Lista 4001 Brillante



Diámetro Fracc.	Equiv.		Longitud Canal		Longitud Total		No. de Canales	EDP Brillante
	Decimal	mm	Pulg.	mm.	Pulg.	mm		
3/64	.0469	1.19	.500	12.70	2.500	63.50	4	C25020
1/16	.0625	1.59	.500	12.70	2.500	63.50	4	C25060
5/64	.0781	1.98	.750	19.05	3.000	76.20	4	C25100
3/32	.0938	2.38	.750	19.05	3.000	76.20	4	C25140
7/64	.1094	2.78	.875	22.23	3.500	88.90	4	C25178
1/8	.1250	3.18	.875	22.23	3.500	88.90	6	C25216
9/64	.1406	3.57	1.000	25.40	4.000	101.60	6	C25254
5/32	.1562	3.97	1.000	25.40	4.000	101.60	6	C25290
11/64	.1719	4.37	1.125	28.58	4.500	114.30	6	C25327
3/16	.1875	4.76	1.125	28.58	4.500	114.30	6	C25366
13/64	.2031	5.16	1.250	31.75	5.000	127.00	6	C25402
7/32	.2188	5.56	1.250	31.75	5.000	127.00	6	C25438
15/64	.2344	5.95	1.500	38.10	6.000	152.40	6	C25474
1/4	.2500	6.35	1.500	38.10	6.000	152.40	6	C25513
17/64	.2656	6.75	1.500	38.10	6.000	152.40	6	C25550
9/32	.2812	7.14	1.500	38.10	6.000	152.40	6	C25608
19/64	.2969	7.54	1.500	38.10	6.000	152.40	6	C25622
5/16	.3125	7.94	1.500	38.10	6.000	152.40	6	C25661
21/64	.3281	8.33	1.500	38.10	6.000	152.40	6	C25698
11/32	.3438	8.73	1.500	38.10	6.000	152.40	6	C25733
23/64	.3594	9.13	1.750	44.45	7.000	177.80	6	C25768
3/8	.3750	9.53	1.750	44.45	7.000	177.80	6	C25807
25/64	.3906	9.92	1.750	44.45	7.000	177.80	6	C25844
13/32	.4062	10.32	1.750	44.45	7.000	177.80	6	C25878
27/64	.4219	10.72	1.750	44.45	7.000	177.80	6	C25911
7/16	.4375	11.11	1.750	44.45	7.000	177.80	6	C25947
29/64	.4531	11.51	1.750	44.45	7.000	177.80	6	C25981
15/32	.4688	11.91	1.750	44.45	7.000	177.80	6	C26014
31/64	.4844	12.30	2.000	50.80	8.000	203.20	6	C26048
1/2	.5000	12.70	2.000	50.80	8.000	203.20	6	C26083
17/32	.5312	13.49	2.000	50.80	8.000	203.20	8	C26150
9/16	.5625	14.29	2.000	50.80	8.000	203.20	8	C26217
19/32	.5938	15.08	2.000	50.80	8.000	203.20	8	C26284
5/8	.6250	15.88	2.250	57.15	9.000	228.60	8	C26351
21/32	.6562	16.67	2.250	57.15	9.000	228.60	8	C26418
11/16	.6875	17.46	2.250	57.15	9.000	228.60	8	C26485

Continúa en la siguiente Página

Rima Recta

Lista 4001 Rimas para Máquina Zanco Recto Canales Rectos (Continuación)

Diámetro Fracc.	Equiv.		Longitud Canal		Longitud Total		No. de Canales	EDP Brillante
	Decimal	mm	Pulg.	mm.	Pulg.	mm		
23/32	.7188	18.26	2.250	57.15	9.000	228.60	8	C26550
3/4	.7500	19.05	2.250	63.50	9.500	241.30	8	C26615
25/32	.7812	19.84	2.250	63.50	9.500	241.30	8	C26680
13/16	.8125	20.64	2.250	63.50	9.500	241.30	8	C26746
27/32	.8438	21.43	2.250	63.50	9.500	241.30	8	C26811
7/8	.8750	22.23	2.625	66.68	10.000	254.00	8	C26876
29/32	.9062	23.02	2.625	66.68	10.000	254.00	8	C26941
15/16	.9375	23.81	2.625	66.68	10.000	254.00	8	C27006
31/32	.9688	24.61	2.625	66.68	10.000	254.00	8	C27072
1	1.0000	25.40	2.750	69.85	10.500	266.70	8	C27137
1-1/16	1.0625	26.99	2.750	69.85	10.500	266.70	10	C27144
1-1/8	1.1250	28.58	2.875	73.03	11.000	279.40	10	C27152
1-3/16	1.1875	30.16	2.875	73.03	11.000	279.40	10	C27159
1-1/4	1.2500	31.75	3.000	76.20	11.500	292.10	10	C27166
1-3/8	1.3750	34.93	3.250	82.55	12.000	304.80	10	C27180
1-1/2	1.5000	38.10	3.500	88.90	12.500	317.50	12	C27195

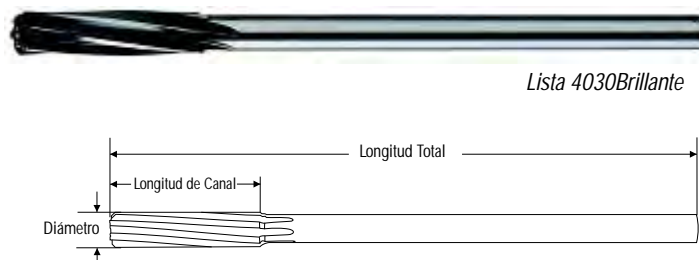
Rima Helicoidal

Lista 4030 Rimas para Máquina Zanco Recto Canales Helicoidales

CARACTERISTICAS



APLICACIONES



Diámetro Fracc.	Equiv.		Longitud Canal		Longitud Total		No. de Canales	EDP Brillante
	Decimal	mm	Pulg.	mm.	Pulg.	mm		
21/64	.3281	8.33	1-1/2	38.10	6	152.40	6	C29890
11/32	.3438	8.73	1-1/2	38.10	6	152.40	6	C29925
23/64	.3594	9.13	1-3/4	44.45	7	177.80	6	C29960
3/8	.3750	9.53	1-3/4	44.45	7	177.80	6	C29997
25/64	.3906	9.92	1-3/4	44.45	7	177.80	6	C30033
13/32	.4062	10.32	1-3/4	44.45	7	177.80	6	C30067
7/16	.4375	11.11	1-3/4	44.45	7	177.80	6	C30134
29/64	.4531	11.51	1-3/4	44.45	7	177.80	6	C30168

Continúa en la siguiente página



Lista 4030 Rimas para Máquina Zanco Recto Canales Helicoidales (Continuación)

Diámetro Frac.	Equiv.		Longitud Canal		Longitud Total		No. de Canales	EDP Brillante
	Decimal	mm	Pulgs	mm.	Pulgs.	mm		
15/32	.4688	11.91	1-3/4	44.45	7	177.80	6	C30201
31/64	.4844	12.30	2	50.80	8	203.20	6	C30235
1/2	.5000	12.70	2	50.80	8	203.20	6	C30268
17/32	.5312	13.49	2	50.80	8	203.20	8	C30335
9/16	.5625	14.28	2	50.80	8	203.20	8	C30402
19/32	.5938	15.08	2	50.80	8	203.20	8	C30469
5/8	.6250	15.88	2-1/4	57.15	9	228.60	8	C30536
21/32	.6562	16.67	2-1/4	57.15	9	228.60	8	C30603
11/16	.6875	17.46	2-1/4	57.15	9	228.60	8	C30670
23/32	.7188	18.26	2-1/4	57.15	9	228.60	8	C30735
3/4	.7500	19.05	2-1/2	63.50	9-1/2	241.30	8	C30800
25/32	.7812	19.84	2-1/2	63.50	9-1/2	241.30	8	C30865
13/16	.8125	20.64	2-1/2	63.50	9-1/2	241.30	8	C30931
7/8	.8750	22.23	2-5/8	66.68	10	254.00	8	C31061
15/16	.9375	23.81	2-5/8	66.68	10	254.00	8	C31191
1	1.0000	25.40	2-3/4	69.85	10-1/2	266.70	8	C31322
1-1/8	1.1250	28.58	2-7/8	73.03	11	279.40	10	C31337
1-1/4	1.2500	31.75	3	76.20	11-1/2	292.10	10	C31351
1-3/8	1.3750	34.93	3-1/4	82.55	12	304.80	10	C31365
1-1/2	1.5000	38.10	3-1/2	88.90	12-1/2	317.50	12	C31380

Zanco Cónico

Lista 4005 Rimas para Máquina Zanco Cónico Canales Rectos

CARACTERÍSTICAS

ESPECIFICACIONES ANSI

A.A.V.

APLICACIONES

ACERO GRADO HERRAMIENTA

INOXIDABLE

USO GENERAL

BRILLANTE

FUNDICIÓN

ZANCO

FLAUTA RECTA

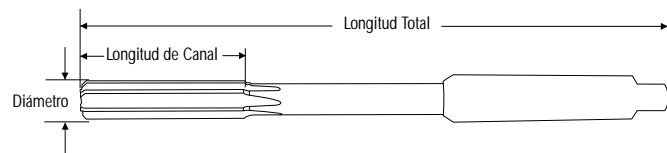
ALUMINIO

BARRERAS PASADIZO

PLÁSTICO



Lista 4005 Brillante



Diámetro Frac.	Equiv.		Longitud Canal		Longitud Total		Cono Morse	No. de Canales	EDP Brillante
	Decimal	mm	Pulgs	mm.	Pulgs.	mm			
1/4	.2500	6.35	1-1/2	38.10	6	152.40	11	6	C33842
5/16	.3125	7.94	1-1/2	38.10	6	152.40	11	6	C33986
3/8	.3750	9.53	1-3/4	44.45	7	177.80	11	6	C34129
7/16	.4375	11.11	1-3/4	44.45	7	177.80	11	6	C34266
1/2	.5000	12.70	2	50.80	8	203.20	11	6	C34400
17/32	.5312	13.49	2	50.80	8	203.20	11	6	C34467
9/16	.5625	14.29	2	50.80	8	203.20	11	8	C34534
19/32	.5938	15.08	2	50.80	8	203.20	11	8	C34601
5/8	.6250	15.88	2-1/4	57.15	9	228.60	21	8	C34668
21/32	.6562	16.67	2-1/4	57.15	9	228.60	21	8	C34735

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Zanco Cónico

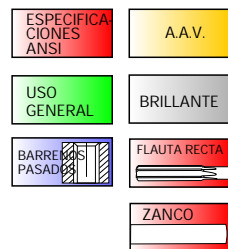
Lista 4005 Rimas para Máquina Zanco Cónico Canales Rectos (Continuación)

Diámetro Fracc.	Equiv.		Longitud Canal		Longitud Total		Cono Morse	No. de Canales	EDP Brillante
	Decimal	mm	Pulg.	mm.	Pulg.	mm			
11/16	.6875	17.46	2-1/4	57.15	9	228.60	2	8	C34802
23/32	.7188	18.26	2-1/4	57.15	9	228.60	2	8	C34867
3/4	.7500	19.05	2-1/2	63.50	9-1/2	241.30	2	8	C34932
25/32	.7812	19.84	2-1/2	63.50	9-1/2	241.30	2	8	C34997
13/16	.8125	20.64	2-1/2	63.50	9-1/2	241.30	2	8	C35063
27/32	.8438	21.43	2-1/2	63.50	9-1/2	241.30	2	8	C35128
7/8	.8750	22.23	2-5/8	66.68	10	254.00	2	8	C35193
29/32	.9062	23.02	2-5/8	66.68	10	254.00	2	8	C35258
15/16	.9375	23.81	2-5/8	66.68	10	254.00	3	8	C35323
31/32	.9688	24.61	2-5/8	66.68	10	254.00	3	8	C35389
1	1.0000	25.40	2-3/4	69.85	10-1/2	266.70	3	8	C35454
1-1/16	1.0625	26.99	2-3/4	69.85	10-1/2	266.70	3	10	C35461
1-1/8	1.1250	28.58	2-7/8	73.03	11	279.40	3	10	C35469
1-3/16	1.1875	30.16	2-7/8	73.03	11	279.40	3	10	C35476
1-1/4	1.2500	31.75	3	76.20	11-1/2	292.10	4	10	C35483
1-5/16	1.3125	33.34	3	76.20	11-1/2	292.10	4	10	C35490
1-3/8	1.3750	34.93	3-1/4	82.55	12	304.80	4	10	C35497
1-7/16	1.4375	36.51	3-1/4	82.55	12	304.80	4	10	C35505
1-1/2	1.5000	38.10	3-1/2	88.90	12-1/2	317.50	4	12	C35512

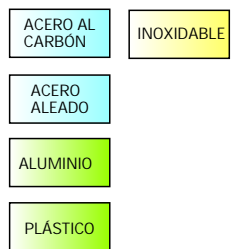
Carburo Sólido

Lista 1730 Rimas de Carburo Sólido Zanco Recto Canales Rectos

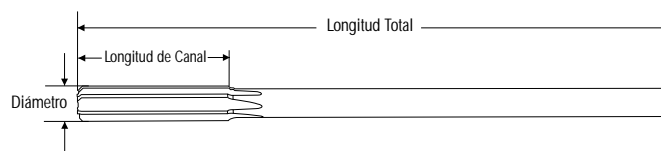
CARACTERÍSTICAS



APLICACIONES



Lista 1730 Brillante



Diámetro Fracc.	Equiv.		Diám. de Zanco		Longitud Canal		Longitud Total		No. de Canales	EDP Brillante
	Decimal	mm	Pulg.	mm.	Pulg.	mm.	Pulg.	mm		
1/16	.0625	1.59	.058	1.47	.375	9.53	1.500	38.10	4	C50103
3/32	.0938	2.38	.088	2.24	.500	12.70	2.000	50.80	4	C50121
1/8	.1250	3.18	.120	3.05	.625	15.88	2.250	57.15	4	C50133
5/32	.1562	3.97	.151	3.84	.750	19.05	2.500	63.50	4	C50145
3/16	.1875	4.76	.182	4.62	.875	22.23	2.750	69.85	4	C50157
7/32	.2188	5.56	.213	5.41	1.000	25.40	3.000	76.20	4	C50168
1/4	.2500	6.35	.244	6.20	1.000	25.40	3.000	76.20	4	C50180
9/32	.2812	7.14	.270	6.86	1.125	28.58	3.250	82.55	6	C50194
5/16	.3125	7.94	.301	7.65	1.125	28.58	3.250	82.55	6	C50203
11/32	.3438	8.73	.332	8.43	1.250	31.75	3.500	88.90	6	C50214
3/8	.3750	9.53	.363	9.22	1.250	31.75	3.500	88.90	6	C50226



Lista 4703 Rimas con Insertos de Carburo Zanco Recto Canales Rectos

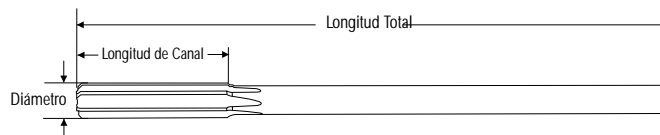
CARACTERÍSTICAS



APLICACIONES



Lista 4001 Brillante



Diámetro Fracc.	Equiv.		Diám. de Zanco		Longitud Canal		Longitud Total		No. de Canales	EDP Brillante
	Decimal	mm	Pulg.	mm.	Pulg.	mm.	Pulg.	mm		
1/4	.2500	6.35	.2405	6.11	1.500	38.10	6.000	152.40	4	C50365
9/32	.2812	7.14	.2485	6.31	1.500	38.10	6.000	152.40	4	C50382
5/16	.3125	7.94	.2792	7.09	1.500	38.10	6.000	152.40	4	C50391
11/32	.3438	8.73	.2792	7.09	1.500	38.10	6.000	152.40	4	C50402
3/8	.3750	9.53	.3105	7.89	1.750	44.45	7.000	177.80	4	C50414
13/32	.4062	10.32	.3105	7.89	1.750	44.45	7.000	177.80	4	C50423
7/16	.4375	11.11	.3730	9.47	1.750	44.45	7.000	177.80	6	C50428
15/32	.4688	11.91	.3730	9.47	1.750	44.45	7.000	177.80	6	C50433
1/2	.5000	12.70	.4355	11.06	2.000	50.80	8.000	203.20	6	C50438
17/32	.5312	13.49	.4355	11.06	2.000	50.80	8.000	203.20	6	C50443
9/16	.5625	14.29	.4355	11.06	2.000	50.80	8.000	203.20	6	C50449
5/8	.6250	15.88	.5620	14.27	2.250	57.15	9.000	228.60	6	C50459



MACHUELOS

Lista 1001, 1002,1003 Machuelos Uso General Acero Alta Velocidad Rosca Derecha Rectificada

CARACTERISTICAS

ESPECIFICACIONES	A.A.V.
USO GENERAL	BRILLANTE
BARRENDOS CIEGOS	TIN
BARRENDOS PASADOS	CÓNICO 7-10
ROSCA RECTIFICADA	SEMI-CÓNICO 3-5
	RECTO 1-½-2

APLICACIONES

ACERO ALEADO
ACERO AL CARBÓN
INOXIDABLE
ALUMINIO



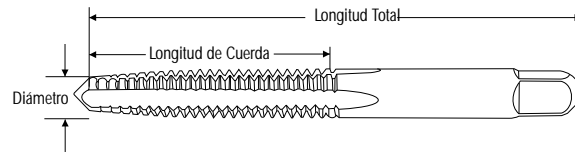
Lista 1001 Cónico Brillante



Lista 1002 Semicónico Brillante



Lista 1003 Recta Brillante



Diám. Fracc.	Equivalente Decimal	mm	Hilos x Pulgada	No. de Canales	Ajuste	Long. de Cuerda Pulgs.	mm	Longitud Total Pulgs.	mm	EDP Brillante 1001	EDP Brillante 1002	EDP Brillante 1003
1/8	.125	3.18	NS-40	3	H2	5/8	15.88	1-15/16	49.21	1001-04402	1002-04402	1003-04402
1/8	.125	3.18	NS-44	3	H2	5/8	15.88	1-15/16	49.21	1001-04442	1002-04442	1003-04442
5/32	.1562	3.97	NS-32	4	H3	3/4	19.05	2-1/8	53.98	1001-05323	1002-05323	1003-05323
5/32	.1562	3.97	NS-36	4	H2	3/4	19.05	2-1/8	53.98	1001-05362	1002-05362	1003-05362
3/16	.1875	4.76	NS-24	4	H3	7/8	22.22	2-3/8	60.33	1001-06243	1002-06243	1003-06243
3/16	.1875	4.76	NS-32	4	H3	7/8	22.22	2-3/8	60.33	1001-06323	1002-06323	1003-06323
7/32	.2188	5.56	NS-24	4	H3	15/16	23.81	2-3/8	60.33	1001-07243	1002-07243	1003-07243
7/32	.2188	5.56	NS-32	4	H3	15/16	23.81	2-3/8	60.33	1001-07323	1002-07323	1003-07323
0	.0600	1.52	NF-80	2	H1	5/16	7.94	1-5/8	41.28	C54025	C54026	C54027
1	.0730	1.85	NC-64	2	H1	3/8	9.53	1-11/16	42.86	C54055	C54056	C54057
1	.0730	1.85	NF-72	2	H1	3/8	9.53	1-11/16	42.88	C54060	C54061	C54062
2	.0860	2.18	NC-56	3	H2	3/8	9.53	1-3/4	44.45	C54089	C54090	C54091
2	.0860	2.18	NF-64	3	H2	7/16	11.11	1-3/4	44.45	C54093	C54094	C54095
3	.0990	2.51	NC-48	3	H2	1/2	12.70	1-13/16	46.04	C54115	C54116	C54117
3	.0990	2.51	NF-56	3	H2	1/2	12.70	1-13/16	46.04	C54120	C54121	C54122
4	.1120	2.84	NS-36	3	H2	9/16	14.30	1-7/8	47.63	C54139	C54140	C54141
4	.1120	2.84	NC-40	3	H2	9/16	14.30	1-7/8	47.63	C54149	C54150	C54151
4	.1120	2.84	NF-48	3	H2	9/16	14.30	1-7/8	47.63	C54153	C54154	C54155
5	.1250	3.18	NC-40	3	H2	5/8	15.88	1-15/16	49.21	C54188	C54189	C54190
5	.1250	3.18	NF-44	3	H2	5/8	15.88	1-15/16	49.21	C54192	C54193	C54194
6	.1380	3.51	NC-32	3	H3	11/16	17.46	2	50.80	C54223	C54224	C54225
6	.1380	3.51	NF-40	3	H2	11/16	17.46	2	50.80	C54232	C54233	C54234
8	.1640	4.17	NC-32	4	H3	3/4	19.05	2-1/8	53.98	C54277	C54278	C54279
8	.1640	4.17	NF-36	4	H2	3/4	19.05	2-1/8	53.98	C54289	C54290	C54291
10	.1900	4.83	NC-24	4	H3	7/8	22.23	2-3/8	60.33	C54329	C54330	C54331
10	.1900	4.83	NF-32	4	H3	7/8	22.23	2-3/8	60.33	C54356	C54357	C54358
12	.2160	5.49	NC-24	4	H3	15/16	23.81	2-3/8	60.33	C54385	C54386	C54387
12	.2160	5.49	NF-28	4	H3	15/16	23.81	2-3/8	60.33	C54389	C54390	C54391
1/4	.2500	6.35	NC-20	4	H3	1	25.40	2-1/2	63.50	C54453	C54454	C54455
1/4	.2500	6.35	NF-28	4	H3	1	25.40	2-1/2	63.50	C54469	C54470	C54471
5/16	.3125	7.94	NC-18	4	H3	1-1/8	28.58	2-23/32	69.06	C54504	C54505	C54506
5/16	.3125	7.94	NF-24	4	H3	1-1/8	28.58	2-23/32	69.06	C54518	C54519	C54520

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Machuelos

Lista 1001, 1002,1003 Machuelos Uso General Acero Alta Velocidad Rosca Derecha Rectificada (Continuación)

BROCAS

Diám. Fracc.	Equivalente Decimal	Hilos x mm	No. de Pulgada Canales	Ajuste	Long. de Cuerda Pulg.	mm	Longitud Total Pulg.	mm	EDP Brillante 1001	EDP Brillante 1002	EDP Brillante 1003	
3/8	.3750	9.53	NC-16	4	H3	1.250	31.75	2.938	74.61	C54582	C54583	C54584
3/8	.3750	9.53	NF-24	4	H3	1.250	31.75	2.938	74.61	C54595	C54596	C54597
7/16	.4375	11.11	NC-14	4	H3	1.438	36.51	3.156	80.17	C54652	C54653	C54654
7/16	.4375	11.11	NF-20	4	H3	1.438	36.51	3.156	80.17	C54661	C54662	C54663
1/2	.5000	12.70	NC-13	4	H3	1.656	42.06	3.375	85.73	C54726	C54727	C54728
1/2	.5000	12.70	NF-20	4	H3	1.656	42.06	3.375	85.73	C54737	C54738	C54739
9/16	.5625	14.29	NC-12	4	H3	1.656	42.07	3.594	91.28	C54759	C54760	C54761
9/16	.5625	14.29	NF-18	4	H3	1.656	42.07	3.594	91.28	C54765	C54766	C54767
5/8	.6250	15.88	NC-11	4	H3	1.813	46.04	3.813	96.84	C54779	C54780	C54781
5/8	.6250	15.88	NF-18	4	H3	1.813	46.04	3.813	96.84	C54787	C54788	C54789
11/16	.6875	17.46	NC-11	4	H3	1.813	46.04	4.031	102.39	C54813	C54814	C54815
11/16	.6875	17.46	NF-16	4	H3	2.000	46.04	4.031	102.39	C54817	C54818	C54819
3/4	.7500	19.05	NC-10	4	H3	2.000	50.80	4.250	107.95	C54838	C54839	C54840
3/4	.7500	19.05	NF-16	4	H3	2.219	50.80	4.250	107.95	C54846	C54847	C54848
7/8	.8750	22.23	NC-9	4	H4	2.219	56.36	4.688	119.06	C54884	C54885	C54886
7/8	.8750	22.23	NF-14	4	H4	2.500	56.36	4.688	119.06	C54890	C54891	C54892
1	1.0000	25.40	NC-8	4	H4	2.500	63.50	5.125	130.18	C54923	C54924	C54925
1	1.0000	25.40	NF-12	4	H4	2.500	63.50	5.125	130.18	C54928	C54929	C54930
1	1.0000	25.40	NS-14	4	H4	2.563	63.50	5.125	130.18	C54933	C54934	C54935
1-1/8	1.1250	28.58	NC-7	4	H4	2.563	65.09	5.438	138.11	C54965	C54966	C54967
1-1/8	1.1250	28.58	NF-12	4	H4	2.563	65.09	5.438	138.11	C54971	C54972	C54973
1-1/4	1.2500	31.75	NC-7	4	H4	2.563	65.09	5.750	146.05	C54994	C54995	C54996
1-1/4	1.2500	31.75	NF-12	6	H4	2.563	65.09	5.750	146.05	C55000	C55001	C55002
1-3/8	1.3750	34.93	NC-6	4	H4	2.563	65.09	5.750	146.05	C55027	C55028	C55029
1-3/8	1.3750	34.93	NF-12	6	H4	2.563	65.09	5.750	146.05	C55030	C55031	C55032
1-1/2	1.5000	38.10	NC-6	4	H4	3.000	76.20	6.375	161.93	C55057	C55058	C55059
1-1/2	1.5000	38.10	NF-12	4	H4	3.000	76.20	6.375	161.93	C55063	C55064	C55065

RIMAS

MACHUELOS

Lista 1001M, 1002M,1003M Machuelos Uso General Acero Alta Velocidad Rosca Derecha Rectificada

Diám. mm	Equivalente Decimal	Paso x mm	No. de Canales	Ajuste	Long. de Cuerda Pulg.	mm	Longitud Total Pulg.	mm	EDP Brillante 1001	EDP Brillante 1002	EDP Brillante 1003	
M1.6	.0630	1.60	0.35	2	D3	5/16	7.94	1-5/8	41.28	C54043	C54044	C54045
M1.8	.0709	1.80	0.35	2	D3	3/8	7.94	1-11/16	41.28	C54051	C54052	C54053
M2	.0787	2.00	0.40	3	D3	7/16	11.11	1-3/4	44.45	C54073	C54074	C54075
M2.2	.0866	2.20	0.45	3	D3	7/16	11.11	1-3/4	44.45	C54105	C54106	C54107
M2.5	.0984	2.50	0.45	3	D3	1/2	12.70	1-13/16	46.04	C54131	C54132	C54133
M3	.1181	3.00	0.50	3	D3	5/8	15.88	1-15/16	49.21	C54164	C54165	C54166
M3.5	.1378	3.50	0.60	3	D4	11/16	17.46	2	50.80	C54203	C54204	C54205
M4	.1575	4.00	0.70	4	D4	3/4	19.05	2-1/8	53.98	C54246	C54247	C54248
M4.5	.1771	4.50	0.75	4	D4	7/8	22.23	2-3/8	60.33	C54303	C54304	C54305
M5	.1968	5.00	0.80	4	D4	7/8	22.23	2-3/8	60.33	C54374	C54375	C54376
M6	.2362	6.00	0.75	4	D5	1	25.40	2-1/2	63.50	1001-060755M	1002-060755M	1003-060755M
M6	.2362	6.00	1.00	4	D5	1	25.40	2-1/2	63.50	C54413	C54414	C54415
M7	.2756	7.00	1.00	4	D5	1-1/8	28.58	2-23/32	69.06	C54489	C54490	C54491
M8	.3150	8.00	0.75	4	D5	1-1/8	28.58	2-23/32	69.06	1001-080755M	1002-080755M	1003-080755M
M8	.3150	8.00	1.00	4	D5	1-1/8	28.58	2-23/32	69.06	C54536	C54537	C54538
M8	.3150	8.00	1.25	4	D5	1-1/8	28.58	2-23/32	69.06	C54546	C54547	C54548
M9	.3543	9.00	1.25	4	D5	1-1/4	31.75	2-15/16	74.61	1001-091255M	1002-091255M	1003-091255M
M10	.3937	10.00	0.75	4	D5	1-1/4	31.75	2-15/16	74.61	1001-100755M	1002-100755M	1003-100755M
M10	.3937	10.00	1.00	4	D5	1-1/4	31.75	2-15/16	74.61	1001-101005M	1002-101005M	1003-101005M
M10	.3937	10.00	1.25	4	D5	1-1/4	31.75	2-15/16	74.61	C54617	C54618	C54619

CORTADORES

OTRAS HERRAMIENTAS

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Lista 1001M, 1002M,1003M Machuelos Uso General Acero Alta Velocidad Rosca Derecha Rectificada

(Continuación)

Diám. mm.	Equivalente Decimal	mm	Hilos x Paso	No. de Canales	Ajuste	Long. de Cuerda Pulg.	mm	Longitud Total Pulg.	mm	EDP Brillante 1001	EDP Brillante 1002	EDP Brillante 1003
M10	.3937	10.00	1.50	4	D6	1-1/4	31.75	2-15/16	74.61	C54624	C54625	C54626
M11	43.30	11.00	1.50	4	D6	1-7/16	-	3-5/32	-	1001-111506M	1002-111506M	1003-111506M
M12	.4724	12.00	1.00	4	D6	1-21/32	42.07	3-3/8	85.73	1001-121006M	1002-121006M	1003-121006M
M12	.4724	12.00	1.25	4	D5	1-21/32	42.07	3-3/8	85.73	C54675	C54676	C54677
M12	.4724	12.00	1.50	4	D6	1-21/32	42.07	3-3/8	85.73	1001-121506M	1002-121506M	1003-121506M
M12	.4724	12.00	1.75	4	D6	1-21/32	42.07	3-3/8	85.73	C54689	C54690	C54691
M14	.5512	14.00	1.00	4	D6	1-21/32	42.07	3-19/32	-	1001-141006M	1002-141006M	1003-141006M
M14	.5512	14.00	1.25	4	D6	1-21/32	42.07	3-19/32	-	1001-141256M	1002-141256M	1003-141256M
M14	.5512	14.00	1.50	4	D6	1-21/32	42.07	3-19/32	91.28	C54751	C54752	C54753
M14	.5512	14.00	2.00	4	D7	1-21/32	42.07	3-19/32	91.28	C54755	C54756	C54757
M16	.6299	16.00	1.00	4	D6	1-13/16	46.06	3-13/16	96.84	1001-161006M	1002-161006M	1003-161006M
M16	.6299	16.00	1.50	4	D6	1-13/16	46.06	3-13/16	96.84	C54797	C54798	C54799
M16	.6299	16.00	2.00	4	D7	1-13/16	46.06	3-13/16	96.84	C54801	C54802	C54803
M18	.7087	18.00	1.50	4	D6	1-13/16	46.04	4-1/32	102.39	C54825	C54826	C54827
M18	.7087	18.00	2.50	4	D7	1-13/16	46.04	4-1/32	102.39	C54833	C54834	C54835
M20	.7874	18.00	2.50	4	D7	2	50.80	4-15/32	113.51	C54864	C54865	C54866
M22	.8661	22.00	1.50	4	D6	2-7/32	56.36	4-11/16	119.06	C54872	C54873	C54874
M22	.8661	22.00	2.50	4	D7	2-7/32	56.36	4-11/16	119.06	C54880	C54881	C54882
M24	.9449	24.00	2.00	4	D7	2-7/32	56.36	4-29/32	124.62	C54903	C54904	C54905
M24	.9449	24.00	3.00	4	D8	2-7/32	56.36	4-29/32	124.62	C54907	C54908	C54909
M27	1.0630	27.00	2.00	4	D7	2-1/2	63.50	5-1/8	130.18	C54949	C54950	C54951
M27	1.0630	27.00	3.00	4	D8	2-1/2	63.50	5-1/8	130.18	C54953	C54954	C54955
M30	1.1811	30.00	2.00	4	D7	2-9/16	65.09	5-7/16	138.11	C54982	C54983	C54984
M30	1.1811	30.00	3.50	4	D9	2-9/16	65.09	5-7/16	138.11	C54990	C54991	C54992
M33	1.2992	33.00	2.00	6	D7	2-9/16	65.09	5-3/4	146.05	C55015	C55016	C55017
M33	1.2992	33.00	3.50	4	D9	2-9/16	65.09	5-3/4	146.05	C55023	C55024	C55025
M36	1.4173	36.00	3.00	4	D8	3	76.20	6-1/16	153.99	C55045	C55046	C55047
M36	1.4173	36.00	4.00	4	D9	3	76.20	6-1/16	153.99	C55049	C55050	C55051
M39	1.5354	39.00	3.00	6	D8	3-3/16	80.96	6-11/16	169.86	C55074	C55075	C55076
M39	1.5354	39.00	4.00	6	D9	3-3/16	80.96	6-11/16	169.86	C55078	C55079	C55080

Lista 1004 Juegos Machuelos Uso General Acero Alta Velocidad Rosca Derecha Rectificada

Diám. Fracc.	Equivalente Decimal	mm	Hilos x Pulgada	No. de Canales	Ajuste	Long. de Cuerda Pulg.	mm	Longitud Total Pulg.	mm	EDP Brillante
1/8	.1250	3.18	NS-40	3	H2	5/8	15.88	1-15/16	49.21	1123-04402
1/8	.1250	3.18	NS-44	3	H2	5/8	15.88	1-15/16	49.21	1123-04442
5/32	.1562	3.97	NS-32	4	H3	3/4	19.05	2-1/8	53.98	1123-05323
5/32	.1562	3.97	NS-36	4	H2	3/4	19.05	2-1/8	53.98	1123-05362
3/16	.1875	4.76	NS-24	4	H3	7/8	22.23	2-3/8	60.33	1123-06243
3/16	.1875	4.76	NS-32	4	H3	7/8	22.23	2-3/8	60.33	1123-06323
7/32	.2188	5.56	NS-24	4	H3	15/16	23.81	2-3/8	60.33	1123-07243
7/32	.2188	5.56	NS-32	4	H3	15/16	23.81	2-3/8	60.33	1123-07323
1/4	.2500	6.35	NC-20	4	H3	1	25.40	2-1/2	63.50	C54460
1/4	.2500	6.35	NF-28	4	H3	1	25.40	2-1/2	63.50	C54476
5/16	.3125	7.94	NC-18	4	H3	1-1/8	28.58	2-23/32	69.06	C54511
5/16	.3125	7.94	NF-24	4	H3	1-1/8	28.58	2-23/32	69.06	C54523
3/8	.3750	9.53	NC-16	4	H3	1-1/4	31.75	2-15/16	74.61	C54587
3/8	.3750	9.53	NF-24	4	H3	1-1/4	31.75	2-15/16	74.61	C54600

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Juegos de Machuelos Fraccionales

Lista 1004 Machuelos Uso General Acero Alta Velocidad Rosca Derecha Rectificada (Continuación)

Diám. Fracc.	Equivalente Decimal	mm	Hilos x Pulgada	No. de Canales	Ajuste	Long. de Cuerda Pulg.	mm	Longitud Total Pulg.	mm	EDP Brillante
7/16	.4375	11.11	NC-14	4	H3	1-7/16	36.51	3-5/32	80.17	C54656
7/16	.4375	11.11	NF-20	4	H3	1-7/16	36.51	3-5/32	80.17	C54665
1/2	.5000	12.70	NC-13	4	H3	1-21/32	42.06	3-3/8	85.73	C54731
1/2	.5000	12.70	NF-20	4	H3	1-21/32	42.06	3-3/8	85.73	C54741
9/16	.5625	14.29	NC-12	4	H3	1-21/32	42.07	3-19/32	91.28	C54762
9/16	.5625	14.29	NF-18	4	H3	1-21/32	42.07	3-19/32	91.28	C54768
5/8	.6250	15.88	NC-11	4	H3	1-13/16	46.04	3-13/16	96.84	C54782
5/8	.6250	15.88	NF-18	4	H3	1-13/16	46.04	3-13/16	96.84	C54790
11/16	.6875	17.46	NS-11	4	H3	1-13/16	46.04	4-1/32	102.39	C54816
11/16	.6875	17.46	NS-16	4	H3	1-13/16	46.04	4-1/32	102.39	C54820
3/4	.7500	19.05	NC-10	4	H3	2	2.000	4-1/4	107.95	C54841
3/4	.7500	19.05	NF-16	4	H3	2	2.000	4-1/4	107.95	C54849
7/8	.8750	22.23	NF-9	4	H4	2-7/32	2.219	4-11/16	119.06	C54887
7/8	.8750	22.23	NS-14	4	H4	2-7/32	2.219	4-11/16	119.06	C54893
1	1.0000	25.40	NC-8	4	H4	2-1/2	2.500	5-1/8	130.18	C54926
1	1.0000	25.40	NF-12	4	H4	2-1/2	2.500	5-1/8	130.18	C54931
1	1.0000	25.40	NS-14	4	H4	2-1/2	2.500	5-1/8	130.18	C54936
1-1/8	1.1250	28.58	NC-7	4	H4	2-9/16	2.563	5-7/16	138.11	1123-36074
1-1/8	1.1250	28.58	NF-12	4	H4	2-9/16	2.563	5-7/16	138.11	1123-36124
1-1/4	1.2500	31.75	NC-7	4	H4	2-9/16	2.563	5-3/4	146.05	1123-40074
1-1/4	1.2500	31.75	NF-12	4	H4	2-9/16	2.563	5-3/4	146.05	1123-40124
1-3/8	1.3750	34.93	NC-6	4	H4	2-9/16	2.563	5-3/4	146.05	1123-44064
1-3/8	1.3750	34.93	NF-12	4	H4	2-9/16	2.563	5-3/4	146.05	1123-44124
1-1/2	1.5000	38.10	NC-6	4	H4	3	3.000	6-3/8	161.93	1123-48064
1-1/2	1.5000	38.10	NF-12	4	H4	3	3.000	6-3/8	161.93	1123-48124

Juegos de Machuelos Numérico

Lista 1004N Machuelos Uso General Acero Alta Velocidad Rosca Derecha Rectificada

Diám. Fracc.	Equivalente Decimal	mm	Hilos x Pulgada	No. de Canales	Ajuste	Long. de Cuerda Pulg.	mm	Longitud Total Pulg.	mm	EDP Brillante
0	.0600	1.52	NF-80	2	H1	.313	7.94	1.625	41.28	C54028
1	.0730	1.85	NC-64	2	H1	.375	9.53	1.688	42.86	C54058
1	.0730	1.85	NF-72	2	H1	.375	9.53	1.688	42.88	C54063
2	.0860	2.18	NC-56	3	H1	.375	9.53	1.750	44.45	C54086
2	.0860	2.18	NC-56	3	H2	.375	9.53	1.750	44.45	C54092
2	.0860	2.18	NC-64	3	H2	.438	11.11	1.750	44.45	C54096
3	.0990	2.51	NC-48	3	H2	.500	12.70	1.813	46.04	C54118
3	.0990	2.51	NF-56	3	H2	.500	12.70	1.813	46.04	C54123
4	.1120	2.84	NS-36	3	H2	.563	14.30	1.875	47.63	C54137
4	.1120	2.84	NC-40	3	H2	.563	14.30	1.875	47.63	C54152
4	.1120	2.84	NF-48	3	H2	.563	14.30	1.875	47.63	C54156
5	.1250	3.18	NC-40	3	H2	.625	15.88	1.938	49.21	C54191
5	.1250	3.18	NF-44	3	H2	.625	15.88	1.938	49.21	C54195
6	.1380	3.51	NC-32	3	H3	.688	17.46	2.000	50.80	C54226
6	.1380	3.51	NF-40	3	H2	.688	17.46	2.000	50.80	C54235
8	.1640	4.17	NC-32	4	H3	.750	19.05	2.125	53.98	C54280
8	.1640	4.17	NF-36	4	H2	.750	19.05	2.125	53.98	C54292
10	.1900	4.83	NC-24	4	H3	.875	22.23	2.375	60.33	C54332
10	.1900	4.83	NF32	4	H3	.875	22.23	2.375	60.33	C54359
12	.2160	5.49	NC-24	4	H3	.938	23.81	2.375	60.33	C54388
12	.2160	5.49	NF-28	4	H3	.938	23.81	2.375	60.33	C54392



Juegos de Machuelos Milimétricos

Lista 1004M Machuelos Uso General Acero Alta Velocidad Rosca Derecha Rectificada

Diám. mm.	Paso x mm	No. de Canales	Ajuste	Long. de Cuerda Pulgs.	mm	Longitud Total Pulgs.	mm	EDP Brillante
4	0.70	4	D4	3/4	19.05	2-1/8	53.97	1123-040704M
5	0.80	4	D4	7/8	22.23	2-3/8	60.32	1123-050804M
6	0.75	4	D5	1	25.40	2-1/2	63.50	1123-060755M
6	1.00	4	D5	1	25.40	2-1/2	63.50	1123-061005M
7	1.00	4	D5	1-1/8	28.58	2-23/32	69.05	1123-071005M
8	0.75	4	D5	1-1/8	28.58	2-23/32	69.05	1123-080755M
8	1.00	4	D5	1-1/8	28.58	2-23/32	69.05	1123-081005M
8	1.25	4	D5	1-1/8	28.58	2-23/32	69.05	1123-081255M
9	1.25	4	D5	1-1/4	31.75	2-15/16	74.61	1123-091255M
10	0.75	4	D5	1-1/4	31.75	2-15/16	74.61	1123-100755M
10	1.00	4	D5	1-1/4	31.75	2-15/16	74.61	1123-101005M
10	1.25	4	D5	1-1/4	31.75	2-15/16	74.61	1123-101255M
10	1.50	4	D5	1-1/4	31.75	2-15/16	74.61	1123-101506M
11	1.50	4	D6	1-7/16	36.51	3-5/32	80.16	1123-111506M
12	1.00	4	D6	1-21/32	42.06	3-3/8	85.72	1123-121006M
12	1.25	4	D5	1-21/32	42.06	3-3/8	85.72	1123-121255M
12	1.50	4	D6	1-21/32	42.06	3-3/8	85.72	1123-121506M
12	1.75	4	D6	1-21/32	42.06	3-3/8	85.72	1123-121756M
14	1.00	4	D6	1-21/32	42.06	3-19/32	91.28	1123-141006M
14	1.25	4	D6	1-21/32	42.06	3-19/32	91.28	1123-141256M
14	1.50	4	D6	1-21/32	42.06	3-19/32	91.28	1123-141506M
14	2.00	4	D7	1-21/32	42.06	3-19/32	91.28	1123-142007M
16	1.00	4	D6	1-13/16	45.03	3-13/16	96.83	1123-161006M
16	1.50	4	D6	1-13/16	45.03	3-13/16	96.83	1123-161506M
16	2.00	4	D7	1-13/16	45.03	3-13/16	96.83	1123-162007M
18	1.50	4	D6	1-13/16	45.03	4-15/32	113.50	1123-181506M
20	1.50	4	D6	2	50.80	4-15/32	113.50	1123-201506M
20	2.50	4	D7	2	50.80	4-15/32	113.50	1123-202507M
22	1.50	4	D6	2-7/32	56.36	4-11/16	119.06	1123-221506M

BROCAS

RIMAS

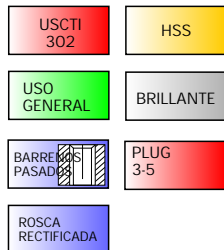
MACHUELOS

CORTADORES

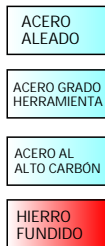
OTRAS
HERRAMIENTAS

Lista 1053 Machuelo Punta Espiral Acero Alta Velocidad Rosca Derecha Rectificada

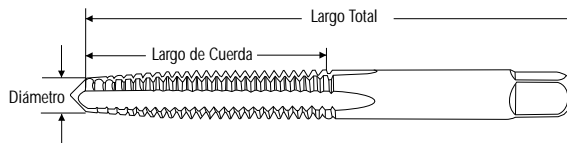
CARACTERISTICAS



APLICACIONES



Lista 1053 Semicónico Brillante



Diám. Fracc.	Equivalente Decimal	mm	Hilos x Pulgada	No. de Canales	Ajuste	Long. de Cuerda Pulgs.	mm	Longitud Total Pulgs.	mm	EDP Brillante
0	.0600	1.52	NF-80	2	H1	5/16	7.94	1-5/8	41.28	C57285
1	.0730	1.85	NF-72	2	H1	3/8	9.53	1-11/16	42.86	C57299
2	.0860	2.18	NC-56	2	H2	7/16	11.11	1-3/4	44.45	C57307
2	.0860	2.18	NF-64	2	H2	7/16	11.11	1-3/4	44.45	C57309
3	.0990	2.51	NC-48	2	H2	1/2	12.70	1-13/16	46.04	C57314
3	.0990	2.51	NF-56	2	H2	1/2	12.70	1-13/16	46.04	C57317
4	.1120	2.84	NS-36	2	H2	9/16	14.29	1-7/8	47.63	C57322
4	.1120	2.84	NC-40	2	H2	9/16	14.29	1-7/8	47.63	C57324
4	.1120	2.84	NF-48	2	H2	9/16	14.29	1-7/8	47.63	C57327
5	.1250	3.18	NC-40	2	H2	5/8	15.88	1-15/16	49.21	C57338
5	.1250	3.18	NF-44	2	H2	5/8	15.88	1-15/16	49.21	C57340
6	.1380	3.51	NC-32	2	H3	11/16	17.46	2	50.80	C57348
6	.1380	3.51	NF-40	2	H2	11/16	17.46	2	50.80	C57352
8	.1640	4.17	NC-32	2	H3	3/4	19.05	2-1/8	53.98	C57361
8	.1640	4.17	NF-36	2	H2	3/4	19.05	2-1/8	53.98	C57365
10	.1900	4.83	NC-24	2	H3	7/8	22.23	2-3/8	60.33	C57373
10	.1900	4.83	NF-32	2	H3	7/8	22.23	2-3/8	60.33	C57380
12	.2160	5.49	NC-24	2	H3	15/16	23.81	2-3/8	60.33	C57388
12	.2160	5.49	NF-28	2	H3	15/16	23.81	2-3/8	60.33	C57390
1/4	.2500	6.35	NC-20	2	H3	1	25.40	2-1/2	63.50	C57406
1/4	.2500	6.35	NF-28	2	H3	1	25.40	2-1/2	63.50	C57415
5/16	.3125	7.94	NC-18	2	H3	1-1/8	28.58	2-23/32	69.06	C57428
5/16	.3125	7.94	NF-24	2	H3	1-1/8	28.58	2-23/32	69.06	C57437
3/8	.3750	9.53	NC-16	3	H3	1-1/4	31.75	2-15/16	74.61	C57452
3/8	.3750	9.53	NF-24	3	H3	1-1/4	31.75	2-15/16	74.61	C57458
3/8	.3750	9.53	NF-24	3	H4	1-1/4	31.75	2-15/16	74.61	C57459
7/16	.4375	11.11	NC-14	3	H3	1-7/16	36.51	3-5/32	80.17	C57469
7/16	.4375	11.11	NF-20	3	H3	1-4/16	36.51	3-5/32	80.17	C57472
1/2	.5000	12.07	NC-13	3	H3	1-21/32	42.07	3-3/8	85.73	C57492
1/2	.5000	12.07	NF-20	3	H3	1-21/32	42.07	3-3/8	85.73	C57497
5/8	.6250	15.88	NC-11	3	H3	1-13/16	46.04	3-13/16	96.84	C57507
3/4	.7500	19.05	NC-10	3	H3	2	50.80	4-1/4	107.95	C57523
3/4	.7500	19.05	NC-10	3	H5	2	50.8	4-1/4	107.95	C57524

BROCAS

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MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS



Lista 1093, 1094 Machuelos Uso General Acero Alta Velocidad Canales Espirales

CARACTERISTICAS

ESPECIFICACIONES	A.A.V.
USO GENERAL	BRILLANTE
BARRETS CIEGOS	TIN
ROSCA RECTIFICADA	SEMI-CÓNICO 3-5
	RECTO 1-½ -2

APLICACIONES

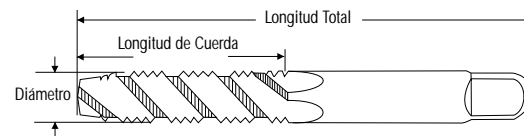
ACERO ALEADO
ACERO AL CARBÓN
ACERO INOXIDABLE



Lista 1093 Brillante Semi-Cónico



Lista 1094 Brillante Recto



Diám. Fracc.	Equivalente Decimal	Equivalente mm	Hilos x Pulgada	No. de Canales	Ajuste	Long. de Cuerda Pulgs.	Long. de Cuerda mm	Longitud Total Pulgs.	Longitud Total mm	EDP Brillante 1093	EDP Brillante 1094
4-40	.1120	2.84	UNC-40	2F	H2	.463	11.75	1.875	47.63	C58515	C58516
6-32	.1380	3.51	UNC-32	2F	H3	.688	17.46	2.000	50.80	C58532	C58533
8-32	.1640	4.17	UNC-32	3F	H3	.750	19.05	2.125	53.98	C58538	C58539
10-24	.1900	4.83	UNC-24	3F	H3	.875	22.23	2.375	60.33	C58544	C58545
10-32	.1900	4.83	UNF-10	3F	H3	.875	22.23	2.375	60.33	C58546	C58547
12-24	.2160	5.49	UNC-24	3F	H3	.938	23.81	2.375	60.33	C58552	C58553
1/4-20	.2500	6.35	UNC-20	3F	H3	1.000	25.40	2.500	63.50	C58562	C58563
1/4-28	.2500	6.35	UNF-28	3F	H3	1.000	25.40	2.500	63.50	C58564	C58565
5/16-18	.3125	7.94	UNC-18	3F	H3	1.125	28.58	2.719	69.06	C58570	C58571
5/16-24	.3125	7.94	UNF-24	3F	H3	1.125	28.58	2.719	69.06	C58572	C58573
3/8-16	.3750	9.53	UNC-16	3F	H3	1.125	31.75	2.938	74.61	C58581	C58582
3/8-24	.3750	9.53	UNF-24	3F	H3	1.125	31.75	2.938	74.61	C58583	C58584
7/16-14	.4375	11.11	UNC-14	3F	H3	1.438	36.51	3.156	80.17	C58593	C58594
7/16-20	.4375	11.11	UNF-20	3F	H3	1.438	36.51	3.156	80.17	C58595	C58596
1/2-13	.5000	12.70	UNC-13	3F	H3	1.656	42.07	3.375	85.73	C58613	C58614
1/2-20	.5000	12.70	UNF-20	3F	H3	1.656	42.07	3.375	85.73	C58615	C58616

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CORTADORES

OTRAS HERRAMIENTAS

Machuelo Para Tubo

Lista 965B Machuelo Para Tubo Acero Alta Velocidad Rosca Derecha (NPT) Ángulo de Corte Medio

BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS

CARACTERÍSTICAS

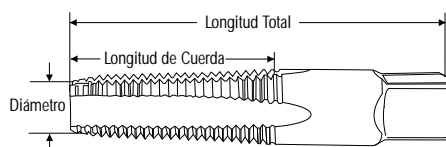
APLICACIONES

USCTI 311	A.A.V.
USO GENERAL	BRILLANTE
NPT	TIN
NPTF DRYSEAL	3/4" / 12"
ROSCA RECTIFICADA	PIPE 3-1/2"

ACERO ALEADO
ACERO AL CARBÓN



Lista 965B Machuelo para Tubo (NPT)



Diám. Fracc.	Equivalente Decimal	mm	Hilos x Pulgada	No. de Canales	Diám. de Zanco Pulgs.	mm	Long. de Cuerda Pulgs.	mm	Longitud Total Pulgs.	mm	EDP Brillante
1/16	.0625	1.59	27	4	.3125	7.94	11/16	17.46	2-1/8	53.98	C64036
1/8	.1250	3.18	27	4	.3125	7.94	3/4	19.05	2-1/8	53.98	C64037
1/8	.1250	3.18	27	4	.4375	11.11	3/4	19.05	2-1/8	53.98	C64038
1/4	.2500	6.35	18	4	.5625	14.29	1-1/16	26.99	2-7/16	61.91	C64039
3/8	.3750	9.53	18	4	.7000	17.78	1-1/16	26.99	2-9/16	65.09	C64040
1/2	.5000	12.70	14	4	.6875	17.46	1-3/8	34.93	3-1/8	79.38	C64041
3/4	.7500	19.05	14	5	.9063	23.02	1-3/8	34.93	3-1/4	82.55	C64042
1	1.0000	25.40	11-1/2	5	1.1250	28.58	1-3/4	44.45	3-1/4	95.25	C64043
1-1/4	1.2500	31.75	11-1/2	5	1.3125	33.34	1-3/4	44.45	4	101.60	C64044
1-1/2	1.5000	38.10	11-1/2	7	1.5000	38.10	1-3/4	44.45	1-1/4	107.95	C64045
2	2.0000	50.80	11-1/2	7	1.8750	47.63	1-3/4	44.45	4-1/2	114.30	C64046

Lista 963B Machuelo para Tubo Acero Alta Velocidad Rosca Derecha (NPS)

CARACTERÍSTICAS

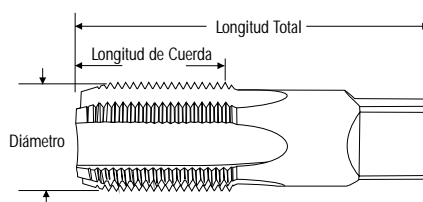
APLICACIONES

USCTI 311	SUSTRATO
USO GENERAL	BRILLANTE
NPS	3/4" / 12"
NPSF DRYSEAL	MOD 3-5
ROSCA RECTIFICADA	

ACERO ALEADO PARA HERRAMIENTA
ACERO AL CARBÓN



Lista 963B Machuelo para tubo (NPS)



Diám. Fracc.	Equivalente Decimal	mm	Hilos x Pulgada	No. de Canales	Diám. de Zanco Pulgs.	mm	Long. de Cuerda Pulgs.	mm	Longitud Total Pulgs.	mm	EDP Brillante
1/8	.1250	3.18	27	4	.3125	7.94	3/4	19.05	2-1/8	53.98	C64115
1/8	.1250	3.18	27	4	.4375	11.11	3/4	19.05	2-1/8	53.98	C64116
1/4	.2500	6.35	18	4	.5625	14.29	1-1/16	26.99	2-7/16	61.91	C64117
3/8	.3750	9.53	18	4	.7000	17.78	1-1/16	26.99	2-9/16	65.09	C64118
1/2	.5000	12.70	14	4	.6875	17.46	1-3/8	34.93	3-1/8	79.38	C64119
3/4	.7500	19.05	14	5	.9063	23.02	1-3/8	34.93	3-1/4	82.55	C64120
1	1.0000	25.40	11-1/2	5	1.1250	28.58	1-3/4	44.45	3-3/4	95.25	C64121



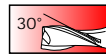


CORTADORES VERTICALES

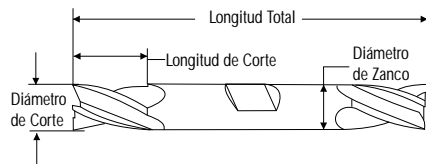
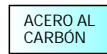
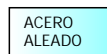
Lista 684 Cortadores Verticales Dos Labios Corte al Centro

BROCAS

CARACTERISTICAS



APLICACIONES



RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS

Diám. Fracc.	Equivalentes		No. de Canales	Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm		Pulg.	mm	Pulg.	mm	Pulg.	mm			
1/8	.1250	3.18	2	3/8	9.53	3/8	9.53	3-1/16	77.79	C42051	C33648	C33689
9/64	.1406	3.57	2	3/8	9.53	7/16	11.11	3-1/8	79.38	C33626	C33649	C33690
5/32	.1562	3.97	2	3/8	9.53	7/16	11.11	3-1/8	79.38	C42052	C33650	C33691
11/64	.1719	4.37	2	3/8	9.53	7/16	11.11	3-1/4	82.55	C33627	C33651	C33692
3/16	.1875	4.76	2	3/8	9.53	7/16	11.11	3-1/4	82.55	C42054	C33652	C33693
13/64	.2031	5.16	2	3/8	9.53	1/2	12.70	3-1/4	82.55	C42055	C33653	C33694
7/32	.2188	5.56	2	3/8	9.53	1/2	12.70	3-1/4	82.55	C42056	C33654	C33695
15/64	.2344	5.95	2	3/8	9.53	1/2	12.70	3-3/8	85.73	C33629	C33655	C33696
1/4	.2500	6.35	2	3/8	9.53	1/2	12.70	3-3/8	85.73	C42058	C33656	C33697
17/64	.2656	6.75	2	3/8	9.53	9/16	14.29	3-3/8	85.73	C33630	C33657	C33698
9/32	.2812	7.14	2	3/8	9.53	9/16	14.29	3-3/8	85.73	C42060	C33658	C33699
19/64	.2969	7.54	2	3/8	9.53	9/16	14.29	3-1/2	88.90	C33631	C33659	C33700
5/16	.3125	7.94	2	3/8	9.53	9/16	14.29	3-1/2	88.90	C42061	C33660	C33701
21/64	.3281	8.33	2	3/8	9.53	9/16	14.29	3-1/2	88.90	C33632	C33661	C33702
11/32	.3438	8.73	2	3/8	9.53	9/16	14.29	3-1/2	88.90	C42063	C33662	C33703
23/64	.3594	9.13	2	3/8	9.53	9/16	14.29	3-1/2	88.90	C33633	C33663	C33704
3/8	.3750	9.53	2	3/8	9.53	9/16	14.29	3-1/2	88.90	C42065	C33664	C33705
25/64	.3906	9.92	2	1/2	12.70	13/16	20.64	4-1/8	104.78	C33634	C33665	C33706
13/32	.4062	10.32	2	1/2	12.70	13/16	20.64	4-1/8	104.78	C42067	C33666	C33707
27/64	.4219	10.72	2	1/2	12.70	13/16	20.64	4-1/8	104.78	C33635	C33667	C33708
7/16	.4375	11.11	2	1/2	12.70	13/16	20.64	4-1/8	104.78	C42069	C33668	C33709
29/64	.4531	11.51	2	1/2	12.70	13/16	20.64	4-1/8	104.78	C33636	C33669	C33710
15/32	.4688	11.91	2	1/2	12.70	13/16	20.64	4-1/8	104.78	C42070	C33670	C33711
31/64	.4844	12.30	2	1/2	12.70	13/16	20.64	4-1/8	104.78	C33637	C33671	C33712
1/2	.5000	12.70	2	1/2	12.70	13/16	20.64	4-1/8	104.78	C42072	C33672	C33713
17/32	.5312	13.49	2	5/8	15.88	1-1/8	28.58	5	127.00	C33638	C33673	C33714
9/16	.5625	14.29	2	5/8	15.88	1-1/8	28.58	5	127.00	C42074	C33674	C33715
19/32	.5938	15.08	2	5/8	15.88	1-1/8	28.58	5	127.00	C33639	C33675	C33716
5/8	.6250	15.88	2	5/8	15.88	1-1/8	28.58	5	127.00	C42076	C33676	C33717
21/32	.6532	16.67	2	3/4	19.05	1-5/16	33.34	5-5/8	142.88	C33640	C33677	C33718
11/16	.6875	17.46	2	3/4	19.05	1-5/16	33.34	5-5/8	142.88	C42078	C33678	C33719
23/32	.7188	18.26	2	3/4	19.05	1-5/16	33.34	5-5/8	142.88	C33641	C33679	C33720
3/4	.7500	19.05	2	3/4	19.05	1-5/16	33.34	5-5/8	142.88	C42080	C33680	C33721
25/32	.7812	19.84	2	7/8	22.23	1-9/16	39.69	6-1/8	155.58	C33642	C33681	C33722
13/16	.8125	20.64	2	7/8	22.23	1-9/16	39.69	6-1/8	155.58	C33643	C33682	C33723
27/32	.8438	21.43	2	7/8	22.23	1-9/16	39.69	6-1/8	155.58	C33644	C33683	C33724
7/8	.8750	22.23	2	7/8	22.23	1-9/16	39.69	6-1/8	155.58	C42084	C33684	C33725
29/32	.9062	23.02	2	1	25.40	1-9/16	39.69	6-3/8	161.93	C33645	C33685	C33726
15/16	.9375	23.81	2	1	25.40	1-5/8	41.28	6-3/8	161.93	C33646	C33686	C33727
3/32	.9688	24.61	2	1	25.40	1-5/8	41.28	6-3/8	161.93	C33647	C33687	C33728
1	1.0000	25.40	2	1	25.40	1-5/8	41.28	6-3/8	161.93	C42088	C33688	C33729



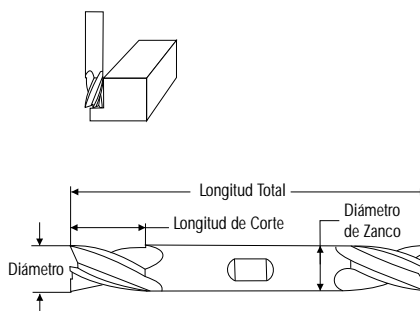
Lista 682 Cortadores Verticales Cuatro Labios Sin Corte al Centro

CARACTERISTICAS

ESPECIFICACIONES ANSI	SUSTRATO A.A.V.
USO GENERAL	BRILLANTE
4 CANALES CC	TIN
30°	TICN

APLICACIONES

ACERO ALEADO
ACERO GRADO HERRAMIENTA
FUNDICION
ALEACION DE COBRE



Diám. Fracc.	Equivalentes		No. de Canales	Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm		Pulg.	mm	Pulg.	mm	Pulg.	mm			
1/8	.1250	3.18	4	3/8	9.53	3/8	9.53	3-1/16	77.79	C43307	C39318	C39359
9/64	.1406	3.57	4	3/8	9.53	7/16	11.11	3-1/8	79.38	C39297	C39319	C39360
5/32	.1562	3.97	4	3/8	9.53	7/16	11.11	3-1/8	79.38	C43308	C39320	C39361
11/64	.1719	4.37	4	3/8	9.53	1/2	12.70	3-1/4	82.55	C39298	C39321	C39362
3/16	.1875	4.76	4	3/8	9.53	1/2	12.70	3-1/4	82.55	C43310	C39322	C39363
13/64	.2031	5.16	4	3/8	9.53	9/16	14.29	3-1/4	82.55	C39299	C39323	C39364
7/32	.2188	5.56	4	3/8	9.53	9/16	14.29	3-1/4	82.55	C43312	C39324	C39365
15/64	.2344	5.95	4	3/8	9.53	5/8	15.88	3-3/8	85.73	C39300	C39325	C39366
1/4	.2500	6.35	4	3/8	9.53	5/8	15.88	3 3/8	85.73	C43314	C39326	C39367
17/64	.2656	6.75	4	3/8	9.53	11/16	17.46	3 3/8	85.73	C39301	C39327	C39368
9/32	.2812	7.14	4	3/8	9.53	11/16	17.46	3-3/8	85.73	C43316	C39328	C39369
19/64	.2969	7.54	4	3/8	9.53	3/4	19.05	3 1/2	88.90	C39302	C39329	C39370
5/16	.3125	7.94	4	3/8	9.53	3/4	19.05	3 1/2	88.90	C43317	C39330	C39371
21/64	.3281	8.33	4	3/8	9.53	3/4	19.05	3 1/2	88.90	C39303	C39331	C39372
11/32	.3438	8.73	4	3/8	9.53	3/4	19.05	3 1/2	88.90	C43319	C39332	C39373
23/64	.3594	9.13	4	3/8	9.53	3/4	19.05	3 1/2	88.90	C39304	C39333	-
3/8	.3750	9.53	4	3/8	9.53	3/4	19.05	3 1/2	88.90	C43321	C39334	C39375
25/64	.3906	9.92	4	1/2	12.70	1	25.40	4 1/8	114.30	C39305	C39335	-
13/32	.4062	10.32	4	1/2	12.70	1	25.40	4 1/8	114.30	C43323	C39336	C39377
27/64	.4219	10.72	4	1/2	12.70	1	25.40	4 1/8	114.30	C39306	C39337	C39378
7/16	.4375	11.11	4	1/2	12.70	1	25.40	4 1/8	114.30	C43325	C39338	C39379
29/64	.4531	11.51	4	1/2	12.70	1	25.40	4-1/8	114.30	C39307	C39339	C39380
15/32	.4688	11.91	4	1/2	12.70	1	25.40	4-1/8	114.30	C43326	C39340	-
31/64	.4844	12.30	4	1/2	12.70	1	25.40	4-1/8	114.30	C39308	C39341	-
1/2	.5000	12.70	4	1/2	12.70	1	25.40	4-1/8	114.30	C43328	C39342	C39383
17/32	.5312	13.49	4	5/8	15.88	1-3/8	34.93	5	127.00	C39309	C39343	-
9/16	.5625	14.29	4	5/8	15.88	1-3/8	34.93	5	127.00	C43330	C39344	C39385
19/32	.5938	15.08	4	5/8	15.88	1-3/8	34.93	5	127.00	C39310	C39345	-
5/8	.6250	15.88	4	5/8	15.88	1-3/8	34.93	5	127.00	C43332	C39346	C39387
21/32	.6562	16.67	4	3/4	19.05	1-5/8	41.28	5-5/8	142.88	C39311	C39347	-
11/16	.6875	17.46	4	3/4	19.05	1-5/8	41.28	5-5/8	142.88	C43334	C39348	C39389
23/32	.7188	18.26	4	3/4	19.05	1-5/8	41.28	5-5/8	142.88	C39312	C39349	C39390
3/4	.7500	19.05	4	3/4	19.05	1-5/8	41.28	5-5/8	142.88	C43336	C39350	C39391
25/32	.7812	19.84	4	7/8	22.23	1-7/8	47.63	6-1/8	155.58	C39313	C39351	-
13/16	.8125	20.64	4	7/8	22.23	1-7/8	47.63	6-1/8	155.58	C43338	C39352	C39393
27/32	.8438	21.43	4	7/8	22.23	1-7/8	47.63	6-1/8	155.58	C39314	C39353	-
7/8	.8750	22.23	4	7/8	22.23	1-7/8	47.63	6-1/8	155.58	C43341	C39354	C39395
29/32	.9062	23.02	4	1	25.40	1-7/8	47.63	6-3/8	161.93	C39315	C39355	-
15/16	.9375	23.81	4	1	25.40	1-7/8	47.63	6-3/8	161.93	C39316	C39356	C39397
31/32	.9688	24.61	4	1	25.40	1-7/8	47.63	6-3/8	161.93	C39317	C39357	-
1	1.0000	25.40	4	1	25.40	1-7/8	47.63	6-3/8	161.93	C43345	C39358	C39399

BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS



Lista 555 Cortadores Verticales Dos Labios Corte al Centro

BROCAS

RIMAS

MACHUELOS

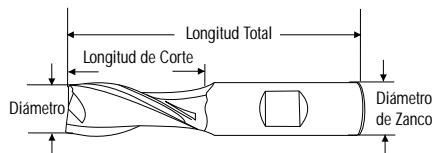
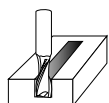
CORTADORES

OTRAS HERRAMIENTAS

CARACTERISTICAS

APLICACIONES

ESPECIFICACIONES ANSI	A-COBALTO M-42	ALEACION DE TITANIO
USO GENERAL	BRILLANTE	ALEACION DE NIKEL
4 CANALES CC	TIN	ALEACION DE COBALTO
30°	TICN	ACERO INOXIDABLE



Lista HGC-2 Brillante



Lista 584 TIN



Lista HGC-2 TICN

Diám. Fracc.	Equivalentes		No. de Canales	Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm		Pulg.	mm	Pulg.	mm	Pulg.	mm			
1/8	.1250	3.18	2	3/8	9.53	3/8	9.53	2-5/16	58.74	C42602	C32498	C32527
5/32	.1562	3.97	2	3/8	9.53	7/16	11.11	2-3/8	60.33	C32480	C32499	C32528
11/64	.1719	4.37	2	3/8	9.53	7/16	11.11	2-3/8	60.33	C32481	C32500	C32529
3/16	.1875	4.76	2	3/8	9.53	7/16	11.11	2-3/8	60.33	C42604	C32501	C32530
13/64	.2031	5.16	2	3/8	9.53	1/2	12.70	2-7/16	61.91	C32482	C32502	C32531
7/32	.2188	5.56	2	3/8	9.53	1/2	12.70	2-7/16	61.91	C32483	C32503	C32532
15/64	.2344	5.95	2	3/8	9.53	1/2	12.70	2-7/16	61.91	C32484	C32504	C32533
1/4	.2500	6.35	2	3/8	9.53	1/2	12.70	2-7/16	61.91	C42607	C32505	C32534
17/64	.2656	6.75	2	3/8	9.53	9/16	14.29	2-1/2	63.50	C32485	C32506	C32535
9/32	.2812	7.14	2	3/8	9.53	9/16	14.29	2-1/2	63.50	C32486	C32507	C32536
19/64	.2969	7.54	2	3/8	9.53	9/16	14.29	2-1/2	63.50	C32487	C32508	C32537
5/16	.3125	7.94	2	3/8	9.53	9/16	14.29	2-1/2	63.50	C42609	C32506	C32538
21/64	.3281	8.33	2	3/8	9.53	9/16	14.29	2-1/2	63.50	C32488	C32510	C32539
11/32	.3438	8.73	2	3/8	9.53	9/16	14.29	2-1/2	63.50	C32489	C32511	C32540
23/64	.3594	9.13	2	3/8	9.53	9/16	14.29	2-1/2	63.50	C32490	C32512	C32541
3/8	.3750	9.53	2	3/8	9.53	9/16	14.29	2-1/2	63.50	C42612	C32513	C32542
25/64	.3906	9.92	2	3/8	9.53	13/16	20.64	2-11/16	68.26	C32491	C32514	C32543
13/32	.4062	10.32	2	3/8	9.53	13/16	20.64	2-11/16	68.26	C32492	C32515	C32544
27/64	.4219	10.72	2	3/8	9.53	13/16	20.64	2-11/16	68.26	C32493	C32516	C32545
7/16	.4375	11.11	2	3/8	9.53	13/16	20.64	2-11/16	68.26	C32494	C32517	C32546
29/64	.4531	11.51	2	1/2	12.70	1	25.40	3-1/4	82.55	C32495	C32518	C32547
15/32	.4688	11.91	2	1/2	12.70	1	25.40	3-1/4	82.55	C32496	C32519	C32548
31/64	.4844	12.30	2	1/2	12.70	1	25.40	3-1/4	82.55	C32497	C32520	-
1/2	.5000	12.70	2	1/2	12.70	1	25.40	3-1/4	82.55	C42616	C32521	C32550
5/8	.6250	15.88	2	5/8	15.88	1-5/16	33.34	3-1/4	82.55	C42619	C32522	C32551
3/4	.7500	19.05	2	3/4	19.05	1-5/16	33.34	3-7/8	98.43	C42622	C32523	C32552
1	1.0000	25.40	2	1	25.40	1-5/8	41.28	4-1/2	114.30	C42629	C32524	C32553
1-1/4	1.2500	31.75	2	1-1/4	31.75	1-5/8	41.28	4-1/2	114.30	C42633	C32525	C32554
1-1/2	1.5000	38.10	2	1-1/4	31.75	1-5/8	41.28	4-1/2	114.30	C42639	C32526	C32555



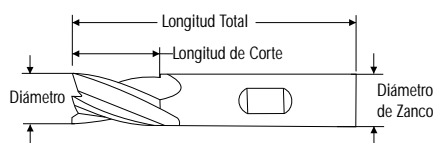
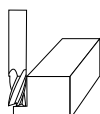
Lista 556, 557, 558 Cortadores Verticales Multi Labios Corte al Centro

CARACTERISTICAS

ESPECIFICACIONES ANSI
A-COBALTO M-42
USO GENERAL
BRILLANTE
4+ CANALES CC
TIN
30°
TICN

APLICACIONES

ALEACION DE TITANIO
ALEACION DE NIKEL
ALEACION DE COBALTO
ACERO INOXIDABLE



Lista HGC-4C Brillante



Lista HGC-4C TiN



Lista HGC-4C TiCN

Diám. Fracc.	Equivalentes		No. de Canales	Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm		Pulg.	mm	Pulg.	mm	Pulg.	mm			
1/8	.1250	3.18	4	3/8	9.53	3/8	9.53	2-5/16	58.74	C42684	C32574	C32610
5/32	.1562	3.97	4	3/8	9.53	1/2	12.70	2-3/8	60.33	C32556	C32575	C32611
11/64	.1719	4.37	4	3/8	9.53	1/2	12.70	2-3/8	60.33	C32557	C32576	C32612
3/16	.1875	4.76	4	3/8	9.53	1/2	12.70	2-3/8	60.33	C42686	C32577	C32613
13/64	.2031	5.16	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C32558	C32578	C32614
7/32	.2188	5.56	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C32559	C32579	C32615
15/64	.2344	5.95	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C32560	C32580	C32616
1/4	.2500	6.35	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C42689	C32581	C32617
1/4	.2500	6.35	4	3/8	9.53	1-1/4	31.75	3-1/16	77.79	C32646	C32655	C32673
1/4	.2500	6.35	4	3/8	9.53	1-3/4	44.45	3-9/16	90.49	C32691	C32700	C32718
17/64	.2656	6.75	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C32561	C32582	C32618
9/32	.2812	7.14	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C32562	C32583	C32619
9/32	.2812	7.14	4	3/8	9.53	1-3/8	34.93	3-1/8	79.38	C32647	C32656	C32674
9/32	.2812	7.14	4	3/8	9.53	2	50.80	3-1/4	82.55	C32692	C32701	C32719
19/64	.2969	7.54	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C32563	C32584	C32620
5/16	.3125	7.94	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C42691	C32585	C32621
5/16	.3125	7.94	4	3/8	9.53	1-3/8	34.93	3-1/8	79.38	C32648	C32657	C32675
5/16	.3125	7.94	4	3/8	9.53	2	50.80	3-1/4	82.55	C32693	C32702	C32720
21/64	.3281	8.33	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C32564	C32586	C32622
11/32	.3438	8.73	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C32565	C32587	C32623
11/32	.3438	8.73	4	3/8	9.53	1-1/2	38.10	3-1/4	82.55	C32649	C32658	C32676
11/32	.3438	8.73	4	3/8	9.53	2-1/2	63.50	4-1/4	107.95	C32694	C32703	C32721
23/64	.3594	9.13	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C32566	C32588	C32624
3/8	.3750	9.53	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C42694	C32589	C32625
3/8	.3750	9.53	4	3/8	9.53	1-1/2	38.10	3-1/4	82.55	C42857	C32659	C32677
3/8	.3750	9.53	4	3/8	9.53	2-1/2	63.50	4-1/4	107.95	C42913	C32704	C32722
25/64	.3906	9.92	4	3/8	9.53	1	25.40	2-11/16	68.26	C32567	C32590	C32626
13/32	.4062	10.32	4	3/8	9.53	1	25.40	2-11/16	68.26	C32568	C32591	C32627
13/32	.4062	10.32	4	3/8	9.53	1-3/4	44.45	3-1/4	82.55	C32650	C32660	C32678
13/32	.4062	10.32	4	3/8	9.53	2-3/4	69.85	4-1/2	114.30	C32695	C32705	C32723
27/64	.4219	10.71	4	3/8	9.53	1	25.40	2-11/16	68.26	C32569	C32592	C32628
7/16	.4375	11.11	4	3/8	9.53	1	25.40	2-11/16	68.26	C32570	C32593	C32629
7/16	.4375	11.11	4	3/8	9.53	1-3/4	44.45	3-1/4	82.55	C32651	C32661	C32679
7/16	.4375	11.11	4	3/8	9.53	2-3/4	69.85	4-1/2	114.30	C32696	C32706	C32724
29/64	.4531	11.51	4	1/2	9.53	1-1/4	31.75	3-1/4	82.55	C32571	C32594	C32630
15/32	.4688	11.91	4	1/2	9.53	1-1/4	31.75	3-1/4	82.55	C32572	C32595	C32631
15/32	.4688	11.91	4	1/2	9.53	2	50.80	4	101.60	C32652	C32662	C32680
15/32	.4688	11.91	4	1/2	9.53	2	50.80	5	127.00	C32697	C32707	C32725

BROCAS
RIMAS
MACHUELOS
CORTADORES
OTRAS HERRAMIENTAS

Una Extremo de Corte

Lista 556, 557, 558 Cortadores Verticales Multi Labios Corte al Centro (Continuación)

Diám. Fracc.	Equivalente		No. de Canales	Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm		Pulg.	mm	Pulg.	mm	Pulg.	mm			
31/64	.4844	12.30	4	½	12.70	1-1/4	31.75	3-1/4	82.55	C32573	C32596	C32532
1/2	.5000	12.70	4	1/2	12.70	1-1/4	31.75	3-1/4	82.55	C42699	C32597	C32633
1/2	.5000	12.70	6	1/2	12.70	1-1/4	31.75	3-1/4	82.55	C42698	C32598	C32634
1/2	.5000	12.70	4	1/2	12.70	2	50.80	4	101.60	C42861	C32663	C32681
1/2	.5000	12.70	4	1/2	12.70	2	50.80	5	127.00	C42917	C32708	C32726
5/8	.6250	15.88	4	5/8	15.88	1-5/8	41.28	3-1/4	82.55	C42703	C32599	C32635
5/8	.6250	15.88	6	5/8	15.88	1-5/8	41.28	3-1/4	82.55	C42702	C32600	C32636
5/8	.6250	15.88	4	5/8	15.88	2-1/2	63.50	4-5/8	117.48	C42864	C32664	C32682
5/8	.6250	15.88	4	5/8	15.88	4	101.60	6-1/8	155.58	C42920	C32709	C32727
3/4	.7500	19.05	4	3/4	19.05	1-5/8	41.28	3-7/8	98.43	C42707	C32601	C32637
3/4	.7500	19.05	6	3/4	19.05	1-5/8	41.28	3-7/8	98.43	C42706	C32602	C32638
3/4	.7500	19.05	4	3/4	19.05	2	50.80	5-1/4	133.35	C42868	C32665	C32683
3/4	.7500	19.05	6	3/4	19.05	2	50.80	5-1/4	133.35	C42867	C32666	C32684
3/4	.7500	19.05	4	3/4	19.05	4	101.60	6-1/4	158.75	C42924	C32710	C32728
3/4	.7500	19.05	6	3/4	19.05	4	101.60	6-1/4	158.75	C42923	C32711	C32729
7/8	.8750	22.23	4	7/8	22.23	3-1/2	88.90	5-3/4	146.05	C32653	C32667	C32685
7/8	.8750	22.23	6	7/8	22.23	3-1/2	88.90	5-3/4	146.05	C32654	C32668	C32686
1	1.0000	25.40	4	1	25.40	2	50.80	4-1/2	114.30	C42715	C32603	C32639
1	1.0000	25.40	6	1	25.40	2	50.80	4-1/2	114.30	C42714	C32604	C32640
1	1.0000	25.40	4	1	25.40	4	101.60	6-1/2	165.10	C42876	C32669	C32687
1	1.0000	25.40	6	1	25.40	4	101.60	6-1/2	165.10	C42875	C32670	C32688
1	1.0000	25.40	4	1	25.40	6	152.40	8-1/2	215.90	C42932	C32712	C32730
1	1.0000	25.40	6	1	25.40	6	152.40	8-1/2	215.90	C42931	C32713	C32731
1-1/4	1.2500	31.75	4	1-1/4	31.75	2	50.80	4-1/2	114.30	C42720	C32605	C32641
1-1/4	1.2500	31.75	6	1-1/4	31.75	2	50.80	4-1/2	114.30	C42719	C32606	C32642
1-1/4	1.2500	31.75	4	1-1/4	31.75	4	101.60	6-1/2	165.10	C42881	C32671	C32689
1-1/4	1.2500	31.75	6	1-1/4	31.75	4	101.60	6-1/2	165.10	C42880	C32672	C32690
1-1/4	1.2500	31.75	4	1-1/4	31.75	6	152.40	8-1/2	215.90	C42937	C32714	C32732
1-1/4	1.2500	31.75	6	1-1/4	31.75	6	152.40	8-1/2	215.90	C42936	C32715	C32733
1-1/2	1.5000	38.10	4	1-1/4	31.75	2	50.80	4-1/2	114.30	C42727	C32607	C32743
1-1/2	1.5000	38.10	6	1-1/4	31.75	2	50.80	4-1/2	114.30	C42726	C32608	C32744
1-1/2	1.5000	38.10	4	1-1/4	31.75	8	203.20	10-1/2	266.70	C32698	C32716	C32734
1-1/2	1.5000	38.10	6	1-1/4	31.75	8	203.20	10-1/2	266.70	C62699	C32717	C32735
2	2.0000	50.80	6	2	50.80	4	101.60	7-3/4	196.85	C42731	C32609	C32645

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CORTADORES

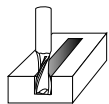
OTRAS
HERRAMIENTAS

Dos Labios Corte al Centro

Lista 685 Cortadores Verticales Acero Alta Velocidad Dos Labios Corte al Centro

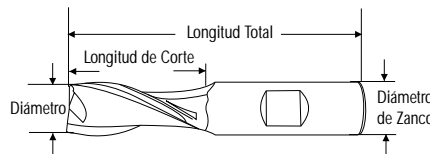
CARACTERISTICAS

ESPECIFICACIONES ANSI A.A.V.
USO GENERAL BRILLANTE
2 CANALES CC TIN
30° TICN



APLICACIONES

ACERO ALEADO
ACERO GRADO HERRAMIENTA
ACERO AL CARBÓN
HIERRO FUNDIDO



Diám. Fracc.	Equivalentes		Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm	Pulg.	mm	Pulg.	mm	Pulg.	mm			
1/8	.1250	3.18	3/8	9.53	3/8	9.53	2-5/16	58.74	C41602	C41550	C33803
5/32	.1562	3.97	3/8	9.53	7/16	11.11	2-3/8	60.33	C33730	C33754	C33804
11/64	.1719	4.37	3/8	9.53	7/16	11.11	2-3/8	60.33	C33731	C33755	C33805
3/16	.1875	4.76	3/8	9.53	7/16	11.11	2-3/8	60.33	C41604	C41551	C33806
13/64	.2031	5.16	3/8	9.53	1/2	12.70	2-7/16	61.91	C33732	C33756	C33807
7/32	.2188	5.56	3/8	9.53	1/2	12.70	2-7/16	61.91	C33733	C33757	C33808
15/64	.2344	5.99	3/8	9.53	1/2	12.70	2-7/16	61.91	C33734	C33758	C33809
1/4	.2500	6.35	3/8	9.53	1/2	12.70	2-7/16	61.91	C41607	C41552	C33810
17/64	.2656	6.75	3/8	9.53	9/16	14.29	2-1/2	63.50	C33735	C33759	C33811
9/32	.2812	7.14	3/8	9.53	9/16	14.29	2-1/2	63.50	C33736	C33760	C33812
19/64	.2969	7.54	3/8	9.53	9/16	14.29	2-1/2	63.50	C33737	C33761	C33813
5/16	.3125	7.94	3/8	9.53	9/16	14.29	2-1/2	63.50	C41609	C41553	C33814
21/64	.3281	8.33	3/8	9.53	9/16	14.29	2-1/2	63.50	C33738	C33762	C33815
11/32	.3438	8.73	3/8	9.53	9/16	14.29	2-1/2	63.50	C33739	C33763	C33816
23/64	.3594	9.13	3/8	9.53	9/16	14.29	2-1/2	63.50	C33740	C33764	C33817
3/8	.3750	9.53	3/8	9.53	9/16	14.29	2-1/2	63.50	C41612	C41554	C33818
25/64	.3906	9.92	3/8	9.53	13/16	20.64	2-11/16	68.26	C33741	C33765	C33819
13/32	.4062	10.32	3/8	9.53	13/16	20.64	2-11/16	68.26	C33742	C33766	C33820
27/64	.4219	10.72	3/8	9.53	13/16	20.64	2-11/16	68.26	C33743	C33767	C33821
7/16	.4375	11.11	3/8	9.53	13/16	20.64	2-11/16	68.26	C41615	C33768	C33822
29/64	.4531	11.51	1/2	12.70	13/16	20.64	3-1/4	82.55	C33744	C33769	C33823
15/32	.4688	11.91	1/2	12.70	13/16	20.64	3-1/4	82.55	C33745	C33770	C33824
31/64	.4844	12.30	1/2	12.70	13/16	20.64	3-1/4	82.55	C33746	C33771	C33825
1/2	.5000	12.70	3/8	9.53	13/16	20.64	2-11/16	68.26	C41617	C33772	C33826
1/2	.5000	12.70	1/2	12.70	1	25.40	3-1/4	82.55	C41618	C41555	C33827
33/64	.5156	13.10	1/2	12.70	1-1/8	28.58	3-3/8	85.73	C33747	C33773	C33828
17/32	.5312	13.49	1/2	12.70	1-1/8	28.58	3-3/8	85.73	C33748	C33774	C33829
35/64	.5469	13.89	1/2	12.70	1-1/8	28.58	3-3/8	85.73	C33749	C33775	C33830
9/16	.5625	14.29	1/2	12.70	1-1/8	28.58	3-3/8	85.73	C41620	C33776	C33831
37/64	.5781	14.68	1/2	12.70	1-1/8	28.58	3-3/8	85.73	C33750	C33777	C33832
19/32	.5938	15.06	1/2	12.70	1-1/8	28.28	3-3/8	85.73	C33751	C33778	C33833
39/64	.6094	15.48	1/2	12.70	1-1/8	28.58	3-3/8	85.73	C33752	C33779	C33834
5/8	.6250	15.88	1/2	12.70	1-1/8	28.58	3-3/8	85.73	C41622	C33780	C33835
5/8	.6250	15.88	5/8	15.88	1-5/16	33.34	3-1/4	82.55	C41623	C41556	C33836
11/16	.6875	17.46	1/2	12.70	1-5/16	33.34	3-5/8	92.08	C41625	C33781	C33837
11/16	.6875	17.46	5/8	15.88	1-5/16	33.34	3-1/4	82.55	C41626	C33782	C33838
3/4	.7500	19.05	1/2	12.70	1-5/16	33.34	3-1/4	82.55	C41628	C33783	C33839
3/4	.7500	19.05	3/4	19.05	1-5/16	33.34	3-3/4	98.43	C41629	C33784	C33840
3/4	.7500	19.05	5/8	15.88	1-5/16	33.34	3-7/8	92.08	C41630	C41557	C33841
13/16	.8125	20.64	5/8	15.88	1-1/2	38.10	4	101.60	C41632	C33785	C38900

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CORTADORES

OTRAS HERRAMIENTAS

Dos Labios Corte al Centro

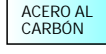
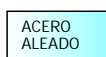
Lista 685 Dos Labios Corte al Centro (Continuación)

Diám. Fracc.	Equivalente		Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm	Pulg.	mm	Pulg.	mm	Pulg.	mm			
7/8	.8750	22.23	5/8	15.88	1-1/2	38.10	4-1/8	104.78	C41635	C33786	C38901
7/8	.8750	22.23	3/4	19.05	1-1/2	38.10	4-1/8	104.78	C41636	C33787	C38902
7/8	.8750	22.23	7/8	22.23	1-1/2	38.10	4-1/8	104.78	C41637	C33788	C38903
15/16	.9375	23.81	7/8	22.23	1-1/2	38.10	4-1/8	104.78	C33753	C33789	C38904
1	1.0000	25.40	5/8	15.88	1-1/2	38.10	4-1/8	104.78	C41641	C33790	C38905
1	1.0000	25.40	3/4	19.05	1-1/2	38.10	4-1/8	104.78	C41642	C33791	C38906
1	1.0000	25.40	7/8	22.23	1-1/2	38.10	4-1/8	104.78	C41643	C33792	C38907
1	1.0000	25.40	1	25.40	1-5/8	41.28	4-1/2	114.30	C41644	C41558	C38908
1-1/8	1.1250	28.58	7/8	22.23	1-5/8	41.28	4-1/8	104.78	C41647	C33793	C38909
1-1/8	1.1250	28.58	1	25.40	1-5/8	41.28	4-1/2	114.30	C41648	C33794	C38910
1-1/4	1.2500	31.75	7/8	22.23	1-5/8	41.28	4-1/8	104.78	C41650	C33795	C38911
1-1/4	1.2500	31.75	1	25.40	1-5/8	41.28	4-1/2	114.30	C41651	C33796	C38912
1-1/4	1.2500	31.75	1-1/4	31.75	1-5/8	41.28	4-1/2	114.30	C41652	C33797	C38913
1-3/8	1.3750	34.93	1	25.40	1-5/8	41.28	4-1/2	114.30	C41655	C33798	C38914
1-1/2	1.5000	38.10	1	25.40	1-5/8	41.28	4-1/2	114.30	C41659	C33799	C38915
1-1/2	1.5000	38.10	1-1/4	31.75	1-5/8	41.28	4-1/2	114.30	C41660	C33800	C38916
1-3/4	1.7500	44.45	1-1/4	31.75	1-5/8	41.28	4-1/2	114.30	C41662	C33801	C38917
2	2.0000	50.80	1-1/4	31.75	1-5/8	41.28	4-1/2	114.30	C41665	C33802	C38918
2	2.0000	50.80	2	50.80	2	50.80	5-3/4	146.05	C43478	C32790	C32796
2	2.0000	50.80	2	50.80	3	76.20	6-3/4	171.45	C32789	C32791	C32797
2	2.0000	50.80	2	50.80	4	101.60	7-3/4	196.85	C43479	C32792	C32798
2	2.0000	50.80	2	50.80	6	152.40	9-3/4	247.65	C43480	C32793	C32799
2-1/2	2.5000	63.50	2	50.80	4	101.60	7-3/4	196.85	C43487	C32794	C32800
2-1/2	2.5000	63.50	2	50.80	6	152.40	9-3/4	247.65	C43488	C32795	C32801

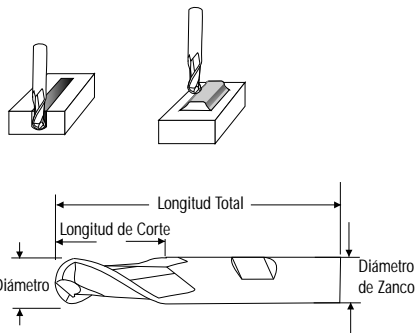
Dos Labios Punta Redonda

Lista 690 Cortadores Verticales Dos Labios Corte al Centro Punta Redonda

CARACTERISTICAS



APLICACIONES



Diám. Fracc.	Equivalente		Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm	Pulg.	mm	Pulg.	mm	Pulg.	mm			
1/8	.1250	3.18	3/8	9.53	3/8	9.53	2-5/16	58.74	C42109	C39010	C39027
3/16	.1875	4.76	3/8	9.53	1/2	12.70	2-3/8	60.33	C42111	C39011	C39028
1/4	.2500	6.35	3/8	9.53	5/8	15.88	2-7/16	61.91	C42114	C39012	C39029
5/16	.3125	7.94	3/8	9.53	3/4	19.05	2-1/4	63.50	C42116	C39013	C39030
3/8	.3750	9.53	3/8	9.53	3/4	19.05	2-1/2	63.50	C42119	C39014	C39031
7/16	.4375	11.11	1/2	12.70	1	25.40	3-1/4	82.55	C42122	C39015	C39032
1/2	.5000	12.70	1/2	12.70	1	25.40	3-1/4	82.55	C42124	C39016	C39033
9/16	.5625	14.29	1/2	12.70	1-1/8	28.58	3-3/8	85.73	C42126	C39017	C39034
5/8	.6250	15.88	1/2	12.70	1-1/8	28.58	3-3/8	85.73	C42128	C39018	C39035
5/8	.6250	15.88	5/8	15.88	1-3/8	28.58	3-1/4	82.55	C42129	C39019	C39036

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CORTADORES

OTRAS HERRAMIENTAS

Dos Labios Punta Redonda

Lista 690 Dos Labios Punta Redonda (Continuación)

Diám. Fracc.	Equivalente		Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm	Pulg.	mm	Pulg.	mm	Pulg.	mm			
3/4	.7500	19.05	1/2	12.70	1-5/16	33.34	3-5/8	92.08	C42132	C39020	C39037
3/4	.7500	19.05	3/4	19.05	1-5/8	41.28	3-7/8	98.43	C42133	C39021	C39038
7/8	.8750	22.23	7/8	22.23	2	50.80	4-1/4	107.95	C42137	C39022	C39039
1	1.0000	25.40	1	25.40	2-1/4	57.15	4-3/4	114.30	C42141	C39023	C39040
1-1/8	1.1250	28.58	1	25.40	2-1/4	57.15	4-3/4	114.30	C42144	C39024	C39041
1-1/4	1.2500	31.75	1-1/4	31.75	2-1/2	63.50	4-3/4	114.30	C42146	C39025	C39042
1-1/2	1.5000	38.10	1-1/4	31.75	2-1/2	63.50	4-3/4	114.30	C42152	C39026	C39043

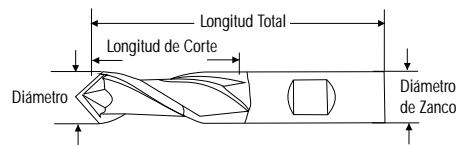
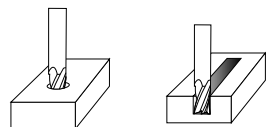
Un Extremo de Corte

Lista 507 Cortadores Verticales Dos Labios Corte al Centro Drill Mill

CARACTERISTICAS



APLICACIONES



Lista HPDM-2 Brillante



Lista HPDM-2 TiN



Lista HPDM-2 TiCN

Diám. Fracc.	Equivalente		No. de Canales	Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm		Pulg.	mm	Pulg.	mm	Pulg.	mm			
1/4	.2500	6.35	2	3/8	9.53	1/2	12.70	2-5/16	58.74	C32430	C40506	C40519
5/16	.3125	7.94	2	3/8	9.53	9/16	14.29	2-5/16	58.74	C32431	C40507	C40520
3/8	.3750	9.53	2	3/8	9.53	9/16	14.29	2-5/16	58.74	C32432	C40508	C40521
7/16	.4375	11.11	2	3/8	9.53	13/16	20.64	2-1/2	63.50	C32433	C40509	C40522
1/2	.5000	12.70	2	1/2	12.70	1	25.40	2	50.80	C32434	C40510	C40523
9/16	.5625	14.29	2	1/2	12.70	1-1/8	28.58	3-1/8	79.31	C32435	C40511	C40524
5/8	.6250	15.88	2	5/8	15.88	1-5/16	33.34	3-7/16	87.31	C32436	C40512	C40525
11/16	.6875	17.46	2	5/8	15.88	1-5/16	33.34	3-7/16	87.31	C32437	C40513	C40526
3/4	.7500	19.05	2	3/4	19.05	1-5/16	33.34	3-9/16	90.49	C32438	C40514	C40527
13/16	.8125	20.64	2	3/4	19.05	1-1/2	38.10	3-1/4	82.55	C32439	C40515	C40528
7/8	.8750	22.23	2	3/4	19.05	1-1/2	38.10	3-1/4	82.55	C32440	C40516	C40529
15/16	.9375	23.81	2	3/4	19.05	1-1/2	38.10	3-1/4	82.55	C32441	C40517	C40530
1	1.0000	25.40	2	3/4	19.05	1-1/2	38.10	3-1/4	82.55	C40505	C40518	C40531

Un Extremo de Corte

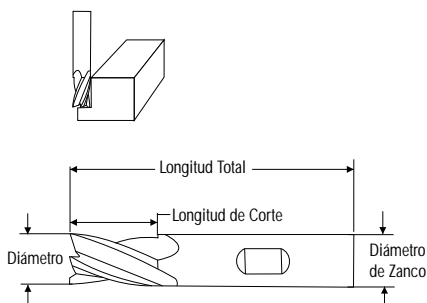
Lista 683, 688 Cortadores Verticales Multi Labios Sin Corte al Centro

CARACTERISTICAS

ESPECIFICACIONES ANSI A.A.V.
USO GENERAL BRILLANTE
4+ CANALES SCC TIN
30° TICN

APLICACIONES

ACERO ALEADO
ACERO GRADO HERRAMIENTA
HIERRO FUNDIDO
ALEACION DE COBRE



Lista 683 Brillante



Lista 683 TiN



Lista 683 TiCN

Diám. Fracc.	Equivalente Decimal	mm	No. de Canales	Diám. de Zanco Pulgs.	mm	Long. de Corte Pulgs.	mm	Longitud Total Pulgs.	mm	Brillante	TiN	TiCN
1/8	.1250	3.18	4	3/8	9.53	3/8	9.53	2-5/16	58.74	C42220	C39427	C39488
9/64	.1406	3.57	4	3/8	9.53	1/2	12.70	2-5/16	58.74	C39400	C39428	C39489
5/32	.1562	3.97	4	3/8	9.53	1/2	12.70	2-3/8	60.33	C39401	C39429	C39490
11/64	.1719	4.37	4	3/8	9.53	1/2	12.70	2-3/8	60.33	C39402	C39430	C39491
3/16	.1875	4.76	4	3/8	9.53	1/2	12.70	2-3/8	60.33	C42222	C39431	C39492
3-16	.1875	4.76	4	3/8	9.53	1-1/4	31.75	3-1/16	77.79	C39247	C39253	C39275
13/64	.1875	5.16	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C39403	C39432	C39493
7/32	.2188	5.56	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C39404	C39433	C39494
7/32	.2188	5.56	4	3/8	9.53	1-1/4	31.75	3-1/16	77.79	C39248	C39254	C39276
15/64	.2344	5.95	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C39405	C39434	C39495
1/4	.2500	6.35	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C42225	C39435	C39496
1/4	.2500	6.35	4	3/8	9.53	1-1/4	31.75	3-1/16	77.79	C42316	C39255	C39277
17/64	.2656	6.75	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C39406	C39436	C39497
9/32	.2812	7.14	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C39407	C39437	C39498
9/32	.2812	7.14	4	3/8	9.53	1-3/8	34.92	3-1/8	79.38	C39249	C39256	C39278
19/64	.2969	7.54	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C39408	C39438	C39499
5/16	.3125	7.94	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C42227	C39439	C39500
5/16	.3125	7.94	4	3/8	9.53	1-3/8	34.92	3-1/8	79.38	C42318	C39257	C39279
21/64	.3281	8.33	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C39409	C39440	C39501
11/32	.3438	8.73	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C39410	C39441	C39502
11/32	.3438	8.73	4	3/8	9.53	1-1/2	38.10	3-1/4	82.55	C39250	C39258	C39280
23/64	.3594	9.13	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C39411	C39442	C39503
3/8	.3750	9.53	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C42230	C39443	C39504
3/8	.3750	9.53	4	3/8	9.53	1-1/2	38.10	3-1/4	82.55	C42321	C39259	C39281
25/64	.3906	9.92	4	3/8	9.53	1	25.40	2-11/16	68.26	C39412	C39444	C39505
13/32	.4062	10.32	4	3/8	9.53	1	25.40	2-11/16	68.26	C39413	C39445	C39506
13/32	.4062	10.32	4	3/8	9.53	1-3/4	44.45	3-3/4	95.25	C39251	C39260	C39282
27/64	.4219	10.72	4	3/8	9.53	1	25.40	2-11/16	68.26	C39414	C39446	C39507
7/16	.4375	11.11	4	3/8	9.53	1	25.40	2-11/16	68.26	C42233	C39447	C39508
7/16	.4375	11.11	4	1/2	12.70	1-3/4	44.45	3-3/4	95.25	C42324	C39261	C39283
29/64	.4531	11.51	4	1/2	12.70	1-1/4	31.75	3-1/4	82.55	C39415	C39448	C39509
15/32	.4688	11.91	4	1/2	12.70	1-1/4	31.75	3-1/4	82.55	C39416	C39449	C39510
15/32	.4688	11.91	4	1/2	12.70	2	50.80	4	101.60	C39252	C39262	C39284
31/64	.4844	12.30	4	1/2	12.70	1-1/4	31.75	3-1/4	82.55	C39417	C39450	C39511
1/2	.5000	12.70	4	3/8	9.53	1	25.40	2-11/16	68.26	C42235	C39451	C39512
1/2	.5000	12.70	4	1/2	12.70	1-1/4	31.75	3-1/4	82.55	C42236	C39452	C39513
1/2	.5000	12.70	4	1/2	12.70	2	50.80	4	101.60	C42326	C39263	C39285
17/32	.5312	13.49	4	1/2	12.70	1-3/8	34.93	3-3/8	85.73	C39418	C39453	C39514
9/16	.5625	14.29	4	1/2	12.70	1-3/8	34.93	3-3/8	85.73	C42238	C39454	C39515
19/32	.5938	15.08	4	1/2	12.70	1-3/8	34.93	3-3/8	85.73	C39419	C39455	C39516
5/8	.6250	15.88	4	1/2	12.70	1-3/8	34.93	3-3/8	85.73	C42240	C39456	C39517
5/8	.6250	15.88	4	5/8	15.88	1-5/8	41.28	3-3/4	95.25	C42241	C39457	C39518
5/8	.6250	15.88	4	5/8	15.88	2-1/2	63.50	4-5/8	117.48	C42329	C39264	C39286
21/32	.6562	16.67	4	5/8	15.88	1-5/8	41.28	3-3/4	95.25	C39420	C39458	C39519

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Un Extremo de Corte

Lista 683, 688 Cortadores Verticales Multi Labios Sin Corte al Centro (Continuación)

Diám. Fracc.	Equivalentente		No. de Canales	Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm		Pulg.	mm	Pulg.	mm	Pulg.	mm			
11/16	.6875	17.46	4	1/2	12.07	1-5/8	41.28	3-5/8	92.08	C42243	C39459	C39520
11/16	.6875	17.46	4	5/8	15.88	1-5/8	41.28	3-1/4	82.55	C42244	C39460	C39521
23/32	.7188	18.26	4	3/4	19.05	1-5/8	41.28	3-7/8	98.43	C39421	C39461	C39522
3/4	.7500	19.05	4	1/2	12.07	1-5/8	41.28	3-5/8	92.08	C42246	C39462	C39523
3/4	.7500	19.05	4	5/8	15.88	1-5/8	41.28	3-1/4	82.55	C42247	C39463	C39524
3/4	.7500	19.05	4	3/4	19.05	1-5/8	41.28	3-7/8	98.43	C42248	C39464	C39525
3/4	.7500	19.05	4	3/4	19.05	3	76.20	5-1/4	133.35	C42332	C39265	C39287
25/32	.7812	19.84	4	3/4	19.05	1-7/8	47.63	4-1/8	104.78	C39422	C39465	C39526
13/16	.8125	20.64	6	5/8	15.88	1-7/8	47.63	4	101.60	C42250	C39466	C39527
27/32	.8438	21.43	4	7/8	22.23	1-7/8	47.63	4-1/8	104.78	C39423	C39467	C39528
7/8	.8750	22.23	6	5/8	15.88	1-7/8	47.63	4	101.60	C42253	C39468	C39529
7/8	.8750	22.23	4	3/4	19.05	1-7/8	47.63	4-1/8	104.78	C42254	C39469	C39530
7/8	.8750	22.23	4	7/8	22.23	1-7/8	47.63	4-1/8	104.78	C42255	C39470	C39531
7/8	.8750	22.23	4	7/8	22.23	3-1/2	88.90	5-3/4	146.05	C42336	C39266	C39288
29/32	.9062	23.02	4	7/8	22.23	1-7/8	47.63	4-1/8	104.78	C39424	C39471	-
15/16	.9375	23.81	4	7/8	22.23	1-7/8	47.63	4-1/8	104.78	C39425	C39472	C39533
31/32	.9688	24.61	4	1	25.40	2	50.80	4-1/2	114.30	C39426	C39473	C39534
1	1.0000	25.40	5	5/8	15.88	2	50.80	4	101.60	C42259	C39474	C39535
1	1.0000	25.40	4	3/4	19.05	2	50.80	4-1/8	104.78	C42260	C39475	C39536
1	1.0000	25.40	4	7/8	22.23	2	50.80	4-1/8	104.78	C42261	C39476	C39537
1	1.0000	25.40	4	1	25.40	2	50.80	4-1/2	114.30	C42262	C39477	C39538
1	1.0000	25.40	4	1	25.40	4	101.60	6-1/2	165.10	C42340	C39267	C39289
1-1/8	1.1250	28.58	4	7/8	22.23	2	50.80	4-1/4	107.95	C42265	C39478	C39539
1-1/8	1.1250	28.58	4	1	25.40	2	50.80	4-1/2	114.30	C42266	C39479	C39540
1-1/8	1.1250	28.58	4	1	25.40	4	101.60	6-1/2	165.10	C42343	C39268	C39290
1-1/4	1.2500	31.75	4	7/8	22.23	2	50.80	4-1/4	107.95	C42268	C39480	C39541
1-1/4	1.2500	31.75	4	1	25.40	2	50.80	4-1/2	114.30	C42269	C39481	C39542
1-1/4	1.2500	31.75	4	1	25.40	4	101.60	6-1/2	165.10	C42345	C39269	C39291
1-1/4	1.2500	31.75	6	1-1/4	31.75	2	50.80	4-1/2	114.30	C42270	C39482	C39543
1-1/4	1.2500	31.75	4	1-1/4	31.75	4	101.60	6-1/2	165.10	C42346	C39271	C39293
1-3/8	1.3750	34.93	4	1	25.40	2	50.80	4-1/2	114.30	C42273	C39483	C39544
1-1/2	1.5000	38.10	6	1	25.40	2	50.80	4-1/2	114.30	C42277	C39484	C39545
1-1/2	1.5000	38.10	4	1	25.40	4	101.60	6-1/2	165.10	C42352	C39270	-
1-1/2	1.5000	38.10	4	1-1/4	31.75	2	50.80	4-1/2	114.30	C42278	C39485	C39546
1-1/2	1.5000	38.10	4	1-1/4	31.75	4	101.60	6-1/2	165.10	C42353	C39272	C39294
1-3/4	1.7500	44.45	4	1-1/4	31.75	2	50.80	4-1/2	114.30	C42280	C39486	C39547
1-3/4	1.7500	44.45	4	1-1/4	31.75	4	101.60	6-1/2	165.10	C42355	C39273	C39295
2	2.0000	50.80	8	1-1/4	31.75	2	50.80	4-1/2	114.30	C42283	C39487	C39548
2	2.0000	50.80	4	1-1/4	31.75	4	101.60	6-1/2	165.10	C42358	C39274	C39296
2	2.0000	50.80	4	2	50.80	2	50.80	5-3/4	146.05	C43534	-	-
2	2.0000	50.80	6	2	50.80	2	50.80	5-3/4	146.05	C43548	C32913	-
2	2.0000	50.80	4	2	50.80	4	101.60	7-3/4	196.85	C43535	-	-
2	2.0000	50.80	6	2	50.80	4	101.60	7-3/4	196.85	C43549	C32914	-
2	2.0000	50.80	4	2	50.80	6	152.40	9-3/4	247.65	C43536	-	-
2	2.0000	50.80	6	2	50.80	6	152.40	9-3/4	247.65	C43550	C32915	-
2	2.0000	50.80	4	2	50.80	8	203.20	11-3/4	298.45	C32817	C32822	-
2	2.0000	50.80	6	2	50.80	8	203.20	11-3/4	298.45	C43551	-	-
2-1/2	2.5000	63.50	4	2	50.80	4	101.60	7-3/4	196.85	C43541	C32823	-
2-1/2	2.5000	63.50	6	2	50.80	4	101.60	7-3/4	196.85	C43558	C32917	-
2-1/2	2.5000	63.50	4	2	50.80	6	152.40	9-3/4	247.65	C43583	-	-
2-1/2	2.5000	63.50	6	2	50.80	6	152.40	9-3/4	247.65	C43542	-	-
2-1/2	2.5000	63.50	4	2	50.80	8	203.20	11-3/4	298.45	C43559	-	-
2-1/2	2.5000	63.50	6	2	63.80	8	203.20	11-3/4	298.45	C43584	-	-
2-1/2	2.5000	63.50	6	2-1/2	50.80	4	101.61	8	203.20	C32818	-	-
2-1/2	2.5000	63.50	6	2-1/2	50.80	6	152.40	10	254.00	C43560	-	-
2-1/2	2.5000	63.50	6	2-1/2	63.80	8	203.20	12	304.80	C43585	-	-
2-1/2	2.5000	63.50	6	2-1/2	63.80	10	254.00	14	355.60	C43586	-	-

BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS

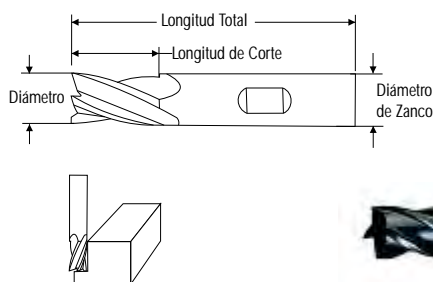
Lista 583 Cortadores Verticales Multi Labios Corte al Centro

CARACTERISTICAS

ESPECIFICACIONES ANSI A.A.V.
USO GENERAL BRILLANTE
4+ CANALES CC TIN
30° TICN

APLICACIONES

ACERO ALEADO
ACERO GRADO HERRAMIENTA
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ALEACIÓN DE COBRE



BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS

Diám. Fracc.	Equivalentes		No. de Canales	Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm		Pulg.	mm	Pulg.	mm	Pulg.	mm			
1/8	.1250	3.18	4	3/8	9.53	3/8	9.53	2-5/16	58.74	C41243	C41520	C33240
9/64	.1406	3.57	4	3/8	9.53	1/2	12.70	2-5/16	58.74	C33141	C33188	C33241
5/32	.1562	3.97	4	3/8	9.53	1/2	12.70	2-3/8	60.33	C33142	C33189	C33242
11/64	.1719	4.37	4	3/8	9.53	1/2	12.70	2-3/8	60.33	C33143	C33190	C33243
3/16	.1875	4.76	4	3/8	9.53	1/2	12.70	2-3/8	60.33	C41245	C41521	C33244
13/64	.2031	5.16	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C33144	C33191	C33245
7/32	.2188	5.56	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C33145	C33192	C41246
15/64	.2344	5.99	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C33146	C33193	C33247
1/4	.2500	6.35	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C41248	C41522	C33248
17/64	.2656	6.75	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C33147	C33194	C33249
9/32	.2812	7.14	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C33148	C33195	C33250
19/64	.2969	7.54	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C33149	C33196	C33251
5/16	.3125	7.94	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C41250	C41523	C33252
21/64	.3281	8.33	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C33150	C33197	C33253
11/32	.3438	8.73	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C33151	C33198	C33254
23/64	.3594	9.13	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C33152	C33199	C33255
3/8	.3750	9.53	4	3/8	9.53	3/4	19.05	2 1/2	63.50	C41253	C41524	C33256
25/64	.3906	9.92	4	3/8	9.53	1	25.40	2-11/16	68.26	C33153	C33200	C33257
13/32	.4062	10.32	4	3/8	9.53	1	25.40	2-11/16	68.26	C33154	C33201	C33258
7/16	.4375	11.11	4	3/8	9.53	1	25.40	2-11/16	68.26	C41254	C33203	C33260
29/64	.4531	8.71	4	1/2	12.70	1-1/4	31.75	3-1/4	82.55	C33157	C33204	C33261
15/32	.4688	11.91	4	1/2	12.70	1-1/4	31.75	3-1/4	82.55	C33158	C33205	C33262
31/64	.4844	12.30	4	1/2	12.70	1-1/4	31.75	3-1/4	82.55	C33159	C33206	C33263
1/2	.5000	12.70	4	3/8	9.53	1	25.40	2-11/16	68.26	C33160	C33207	C33264
1/2	.5000	12.70	4	1/2	12.70	1-1/4	31.75	3-1/4	88.55	C41257	C41525	C33265
17/32	.5312	13.49	4	1/2	12.70	1-3/8	34.93	3-3/8	85.73	C33161	C33208	C33266
9/16	.5625	14.29	4	1/2	12.70	1-3/8	34.93	3-3/8	85.73	C33162	C33209	C33267
19/32	.5938	15.08	4	1/2	12.70	1-3/8	34.93	3-3/8	85.73	C33163	C33210	C33268
5/8	.6250	15.88	4	1/2	12.70	1-3/8	34.93	3-3/8	85.73	C33164	C33211	C33269
5/8	.6250	15.88	4	5/8	15.88	1-5/8	41.28	3-3/4	95.25	C41260	C41526	C33270
21/32	.6562	16.67	4	5/8	15.88	1-5/8	41.28	3-3/4	95.25	C33165	C33212	C33271
11/16	.6875	17.46	4	1/2	12.70	1-5/8	41.28	3-5/8	85.73	C33166	C33213	C33272
11/16	.6875	17.46	4	5/8	15.88	1-5/8	41.28	3-3/4	95.25	C41262	C33214	C33273
23/32	.7188	18.26	4	3/4	19.05	1-5/8	41.28	3-7/8	98.43	C33167	C33215	C33274
3/4	.7500	19.05	4	1/2	12.70	1-5/8	41.28	3-5/8	85.73	C33168	C33216	C33275
3/4	.7500	19.05	4	5/8	15.88	1-5/8	41.28	3-3/4	95.25	C33169	C33217	C33276
3/4	.7500	19.05	4	3/4	19.05	1-5/8	41.28	3-7/8	98.43	C41264	C41527	C33277
25/32	.7812	19.84	4	3/4	19.05	1-7/8	47.63	4-1/8	104.78	C33170	C33218	C33278
13/16	.8125	20.64	4	5/8	15.88	1-7/8	47.63	4	101.60	C33171	C33219	C33279
27/32	.8438	21.43	4	7/8	22.23	1-7/8	47.63	4-1/8	104.78	C33172	C33220	C33280
7/8	.8750	22.23	4	5/8	15.88	1-7/8	47.63	4	101.60	C33173	C33221	C33281
7/8	.8750	22.23	4	3/4	19.08	1-7/8	47.63	4-1/8	104.78	C33174	C33222	C33282

Continúa en la siguiente Página



Lista 583 Cortadores Verticales Multi Labios Corte al Centro (Continuación)

Diám. Fracc.	Equivalente		No. de Canales	Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm		Pulg.	mm	Pulg.	mm	Pulg.	mm			
7/8	.8750	22.23	4	7/8	22.23	1-7/8	47.63	4-1/8	104.78	C41268	C33223	C33283
29/32	.9062	23.02	4	7/8	22.23	1-7/8	47.63	4-1/8	104.78	C33175	C33224	C33284
15/16	.9375	23.81	4	7/8	22.23	1-7/8	47.63	4-1/8	104.78	C33176	C33225	C33285
31/32	.9688	24.61	4	1	25.40	2	50.80	4-1/2	114.30	C33177	C33226	C33286
1	1.0000	25.40	4	5/8	15.88	1-7/8	47.63	4	101.60	C33178	C33227	C33287
1	1.0000	25.40	4	3/4	19.05	1-7/8	47.63	4-1/8	104.78	C33179	C33228	C33288
1	1.0000	25.40	4	7/8	22.23	1-7/8	47.63	4-1/8	104.78	C33180	C33229	C33289
1	1.0000	25.40	4	1	25.40	2	50.80	4-1/2	114.30	C41272	C41529	C33290
1-1/8	1.1250	28.58	4	7/8	22.23	2	50.80	4-1/2	114.30	C33181	C33230	C33291
1-1/8	1.1250	28.58	4	1	25.40	2	50.80	4-1/2	114.30	C41275	C33231	C33292
1-1/4	1.2500	31.75	4	7/8	22.23	2	50.80	4-1/2	114.30	C33182	C33232	C33293
1-1/4	1.2500	31.75	4	1	25.40	2	50.80	4-1/2	114.30	C33183	C33233	C33294
1-1/4	1.2500	31.75	4	1-1/4	31.75	2	50.80	4-1/2	114.30	C41277	C33234	C33295
1-3/8	1.3750	34.93	4	1	25.40	2	50.80	4-1/2	114.30	C33184	C33235	C33296
1-1/2	1.5000	38.10	6	1	25.40	2	50.80	4-1/2	114.30	C33185	C33236	C33297
1-1/2	1.5000	38.10	4	1-1/4	31.75	2	50.80	4-1/2	114.30	C41283	C33237	C33298
1-3/4	1.7500	44.45	6	1-1/4	31.75	2	50.80	4-1/2	114.30	C33186	C33238	C33299
2	2.0000	50.80	8	1-1/4	31.75	2	50.80	4-1/2	114.30	C33187	C33239	C33300

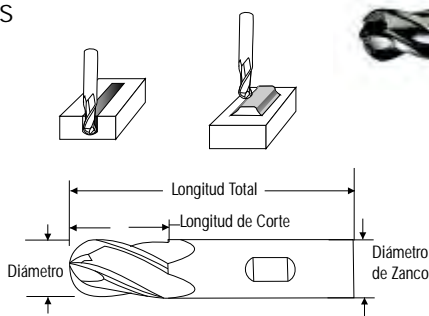
Lista 584 Cortadores Verticales Cuatro Labios Corte al Centro Punta Redonda

CARACTERÍSTICAS

ESPECIFICACIONES ANSI: A.A.V.
 USO GENERAL: BRILLANTE
 4 CANALES CC: TIN
 30°: TiCN

APLICACIONES

ACERO ALEADO
 ACERO GRADO HERRAMIENTA
 HIERRO FUNDIDO
 ALEACIÓN DE COBRE



Diám. Fracc.	Equivalente		No. de Canales	Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiN	TiCN
	Decimal	mm		Pulg.	mm	Pulg.	mm	Pulg.	mm			
1/4	.2500	.635	4	3/8	9.53	5/8	15.88	2-7/16	61.91	C33301	C33303	C33313
5/16	.3125	7.94	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C33302	C33304	C33314
3/8	.3750	9.53	4	3/8	9.53	3/4	19.05	2-1/2	63.50	C41289	C33305	C33315
1/2	.5000	12.70	4	1/2	12.70	1-1/4	31.75	3-1/4	82.55	C41293	C33306	C33316
5/8	.6250	15.88	4	5/8	15.88	2-1/2	63.50	3-3/4	117.48	C41297	C33307	C33317
3/4	.7500	19.05	4	3/4	19.05	1-5/8	41.28	3-7/8	98.43	C41300	C33308	C33318
7/8	.8750	22.23	4	7/8	22.23	1-7/8	47.63	4-1/8	104.78	C41304	C33309	C33319
1	1.0000	25.40	4	1	25.40	2	50.80	4-1/2	114.30	C41308	C33310	C33320
1-1/4	1.2500	31.75	4	1-1/4	31.75	2	50.80	4-1/2	114.30	C41312	C33311	C33321
1-1/2	1.5000	38.10	4	1-1/4	31.75	2	50.80	4-1/2	114.30	C41318	C33312	C33322
2	2.0000	50.80	4	1-1/4	31.75	2	50.80	6-3/4	171.45	C33007	C33010	C33015
2	2.0000	50.80	4	1-1/4	31.75	4	101.60	7-3/4	196.85	C33008	-	C33016
2	2.0000	50.80	4	1-1/4	31.75	5	127.00	8-3/4	222.25	C43564	-	-
2	2.0000	50.80	4	1-1/4	31.75	6	152.40	9-3/4	247.65	C33009	-	-
2-1/2	2.0000	50.80	4	1-1/4	31.75	5	127.00	8-3/4	222.25	C43567	-	C33019



BROCAS
RIMAS
MACHUELOS
CORTADORES
OTRAS HERRAMIENTAS

Lista 577 Cortadores Verticales Multi Labios Sin Corte al Centro

BROCAS

RIMAS

MACHUELOS

CORTADORES

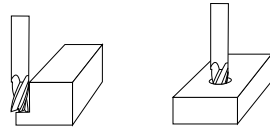
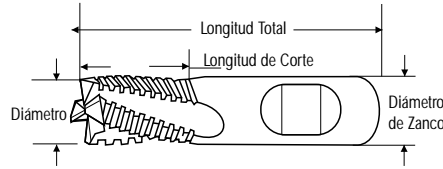
OTRAS HERRAMIENTAS

CARACTERISTICAS

ESPECIFICACIONES ANSI	A-COBALTO M-42
USO GENERAL	BRILLANTE
4+ CANALES SCC	TICN
PERFIL FINO	TIALN
30°	

APLICACIONES

FREE-MACH STAINLESS
ACERO ALEADO
ACERO AL MEDIO CARBON
ACERO AL ALTO CARBON



Lista RG7 Brillante



Lista RG7-TC TiCN



Lista RG7-TA TiAlN

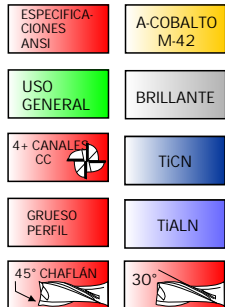
Diám. Fracc.	Equivalente		No. de Canales	Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiCN	TiAlN
	Decimal	mm		Pulg.	mm	Pulg.	mm	Pulg.	mm			
9/16	.5625	14.29	4	1/2	12.70	1-3/8	34.93	3-3/8	85.73	C30738	-	-
5/8	.6250	15.88	4	5/8	15.88	1-5/8	41.28	3-3/4	95.25	C30755	C31127	-
5/8	.6250	15.88	4	5/8	15.88	2-1/2	63.50	4-5/8	117.48	C30756	C31128	-
3/4	.7500	19.05	4	3/4	19.05	1-5/8	41.28	3-7/8	98.43	C30757	C31129	C31077
3/4	.7500	19.05	4	3/4	19.05	3	76.20	5-1/4	133.35	C30758	C31130	C31099
3/4	.7500	19.05	4	3/4	19.05	4	101.60	6-1/4	158.75	C30739	C31101	-
7/8	.8750	22.23	5	3/4	19.05	1-7/8	47.63	4-1/8	104.78	C30761	C31093	-
7/8	.8750	22.23	5	7/8	22.23	1-7/8	47.63	4-1/8	104.78	C30759	C31131	-
7/8	.8750	22.23	5	7/8	22.23	3-1/2	88.90	5-3/4	146.05	C30760	-	-
1	1.0000	25.40	5	3/4	19.05	2	50.80	4-1/4	107.95	C30714	-	-
1	1.0000	25.40	5	1	25.40	2	50.80	4-1/2	114.30	C30762	C31133	C31079
1	1.0000	25.40	5	1	25.40	3	76.20	5-1/2	139.70	C30740	C31102	C31103
1	1.0000	25.40	5	1	25.40	4	101.60	6-1/2	165.10	C30763	C31134	C31080
1	1.0000	25.40	5	1	25.40	6	152.40	8-1/2	215.90	C30741	-	-
1-1/8	1.1250	28.58	6	3/4	19.05	2	50.80	4-1/4	107.95	C30742	-	-
1-1/4	1.2500	31.75	6	3/4	19.05	2	50.80	4-1/4	107.95	C30767	-	-
1-1/4	1.2500	31.75	6	1-1/4	31.75	2	50.80	4-1/2	114.30	C30764	C31135	C31081
1-1/4	1.2500	31.75	6	1-1/4	31.75	3	76.20	5-1/2	139.70	C30743	C31104	C31105
1-1/4	1.2500	31.75	6	1-1/4	31.75	4	101.60	6-1/2	165.10	C30765	C31136	C31082
1-1/4	1.2500	31.75	6	1-1/4	31.75	6	50.80	8-1/2	215.90	C30744	-	-
1-1/2	1.5000	38.10	6	3/4	19.05	2	50.80	4-1/4	107.95	C30770	-	-
1-1/2	1.5000	38.10	6	1-1/4	31.75	2	50.80	4-1/4	107.95	C30768	C31137	-
1-1/2	1.5000	38.10	6	1-1/4	31.75	3	76.20	1	25.40	C30745	-	C31107
1-1/2	1.5000	38.10	6	1-1/4	31.75	4	101.60	6-1/2	165.10	C30769	C3138	C31108
1-1/2	1.5000	38.10	6	1-1/4	31.75	6	152.40	8-1/2	215.90	C30746	-	-
1-3/4	1.7500	44.45	6	1-1/4	31.75	2	50.80	4-1/2	114.30	C30747	-	-
2	2.0000	50.80	8	3/4	19.05	3/4	19.05	3	76.20	C30773	-	-
2	2.0000	50.80	8	1-1/4	31.75	2	50.80	4-1/2	114.30	C30771	-	-
2	2.0000	50.80	8	1-1/4	31.75	4	101.60	6-1/2	165.10	C30772	-	-
2	2.0000	50.80	8	2	50.80	2	50.80	5-3/4	146.05	C30748	-	-
2	2.0000	50.80	8	2	50.80	3	76.20	6-3/4	171.45	C30749	C31100	-
2	2.0000	50.80	8	2	50.80	4	101.60	7-3/4	196.85	C30774	C31140	C31083
2	2.0000	50.80	8	2	50.80	6	152.40	9-3/4	247.65	C30775	C31141	C31084
2	2.0000	50.80	8	2	50.80	8	203.20	11-3/4	298.45	C30776	-	-

Nota: Empaque por unidad

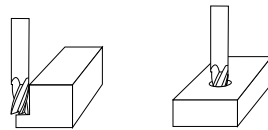
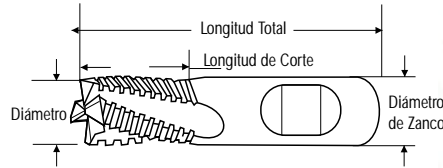


Lista 506 Cortadores Verticales Multi Labios Corte al Centro de Grueso Perfil

CARACTERISTICAS



APLICACIONES



Lista RG8 Brillante



Lista RG8-TC TiCN



Lista RG8-TA TiAlN

Diám. Fracc.	Equivalentente		No. de Canales	Diám. de Zanco		Long. de Corte		Longitud Total		Brillante	TiCN	TiAlN
	Decimal	mm		Pulg.	mm	Pulg.	mm	Pulg.	mm			
3/16	.1875	4.76	4	3/8	9.53	1/2	12.70	2.375	60.33	C30709	-	-
1/4	.2500	6.35	3	3/8	9.53	1/4	6.35	2.063	52.39	C31173	C31291	-
1/4	.2500	6.35	4	3/8	9.53	5/8	15.88	2.438	61.91	C31174	C31292	-
1/4	.2500	6.35	4	3/8	9.53	1-1/4	31.75	3.125	79.38	C31175	-	-
5/16	.3125	7.94	4	3/8	9.53	3/4	19.05	2.500	63.50	C31176	C31293	-
3/8	.3750	9.53	4	3/8	9.53	3/8	9.53	2.156	54.77	C31177	C31294	C31065
3/8	.3750	9.53	4	3/8	9.53	3/4	19.05	2.500	63.50	C31178	C31295	C31067
3/8	.3750	9.53	4	3/8	9.53	1-1/2	38.10	3.250	82.55	C31179	C31296	-
7/16	.4375	11.11	4	1/2	12.70	1-1/4	31.75	3.250	82.55	C30710	-	-
1/2	.5000	12.70	4	1/2	12.70	1/2	12.70	2.500	63.50	C31180	C31297	C31069
1/2	.5000	12.70	4	1/2	12.70	1-1/4	31.75	3.250	82.55	C31181	C31298	C31070
1/2	.5000	12.70	4	1/2	12.70	2	50.80	4.000	101.60	C31182	C31299	C31109
1/2	.5000	12.70	4	1/2	12.70	3	76.20	5.000	127.00	C30732	-	-
5/8	.6250	15.88	4	5/8	15.88	5/8	15.88	2.750	69.85	C31183	C31300	C31071
5/8	.6250	15.88	4	5/8	15.88	1-5/8	41.28	3.750	95.25	C31184	C31301	C31072
5/8	.6250	15.88	4	5/8	15.88	2-1/2	63.50	4.625	117.48	C31190	C31302	-
3/4	.7500	19.05	4	3/4	19.05	3/4	19.05	2.875	73.03	C31193	C31303	C31074
3/4	.7500	19.05	4	3/4	19.05	1-5/8	41.28	3.875	98.43	C31194	C31304	C31075
3/4	.7500	19.05	4	3/4	19.05	3	76.20	5.250	133.35	C31195	C31305	-
1	1.0000	25.40	5	1	25.40	1	25.40	3.500	88.90	C31202	C31309	C31073
1	1.0000	25.40	5	1	25.40	2	50.80	4.500	114.30	C31197	C31306	C31076
1	1.0000	25.40	5	1	25.40	3	76.20	5.500	139.70	C31198	C31307	C31111
1	1.0000	25.40	5	1	25.40	4	101.60	6.500	165.10	C31199	C31308	-
1-1/4	1.2500	31.75	6	1-1/4	31.75	2	50.80	4.500	114.30	C31203	C31310	C31078
1-1/4	1.2500	31.75	6	1-1/4	31.75	3	76.20	5.500	139.70	C31204	C31311	C31112
1-1/4	1.2500	31.75	6	1-1/4	31.75	4	101.60	6.500	165.10	C31205	-	-
1-1/2	1.5000	38.10	6	1-1/4	31.75	3	76.20	5.500	139.70	C31206	-	-
2	2.0000	50.80	6	2	50.80	3	76.20	6.750	171.45	C31207	C31312	-
2	2.0000	50.80	6	2	50.80	4	101.60	7.750	196.85	C31208	C31313	-
2	2.0000	50.80	6	2	50.80	6	152.40	9.750	247.65	C31209	C31314	-

Nota: Empaque por unidad



OTRAS HERRAMIENTAS

Lista 192 Extractor de Tornillos

CARACTERISTICAS

ESPECIFICACIONES ANSI

ACERO ALEADO

TRABAJO PESADO

APLICACIONES

ALEACION GRADO HERRAMIENTA

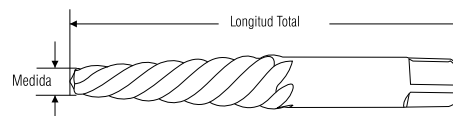
ACERO AL BAJO CARBON

ACERO MEDIO AL CARBON

HIERRO FUNDIDO



Lista 192 Ezy-Out®



Núm.	Punta Corta		Punta Larga		Long. Total		Medida de Tornillo	Diám. Broca Recomendada		EDP
	Pulg.	mm	Pulg.	mm	Pulg.	mm		Pulg.	mm	
1	.054	1.37	.156	3.97	2	50.80	3/16 a 1/4	5/64	1.27	C53651
2	.080	2.03	.188	4.76	2-3/8	60.33	1/4 a 5/16	7/64	1.78	C53652
3	.125	3.18	.250	6.35	2-11/16	68.26	5/16 a 7/16	5/32	1.27	C53653
4	.188	4.76	.328	8.33	2-7/8	73.03	7/16 a 9/16	1/4	6.35	C53654
5	.250	6.35	.438	11.11	3-3/8	85.73	9/16 a 3/4	9/32	7.14	C53655
6	.375	9.53	.594	15.08	3-3/4	95.25	3/4 a 1	13/32	10.16	C53656
7	.500	12.70	.750	19.05	4-1/8	104.78	1 a 1-3/8	17/32	13.33	C53657
8	.750	19.05	1.000	25.40	4-3/8	111.13	1-3/8 a 1-3/4	13/16	19.05	C53658
9	1.000	25.40	1.281	32.54	4-5/8	117.48	1-3/4 a 2-1/8	1-1/16	25.40	C53659
10	1.250	31.75	1.563	39.69	5	127.00	2-1/8 a 2-1/2	1-5/16	31.75	C53660
11	1.500	38.10	1.875	47.63	5-5/8	142.88	2-1/2 a 3	1-9/16	38.10	C53661
12	1.875	47.63	2.313	58.74	6-1/4	158.75	3 a 3-1/2	1-15/16	47.63	C53662

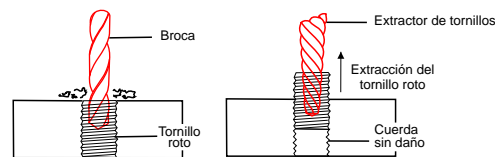
Nota: El tamaño de la broca recomendada para la selección del extractor indicados anteriormente son para condiciones normales. fuera de esta norma se requiere del uso de extractores de otro tamaño, en función de la longitud de la sección rota y la profundidad del agujero.

Lista 192 Juego de Extractores de Tornillos

Núm.	Medida de Tornillo	Pzas. x Pqte.	EDP
15	1 al 5	5	C00906
15-A	1 al 6	6	C00907
16	6, 7, 8 y 9	4	C00908
17	4, 5 y 6	3	C00909



Utilice extractores de tornillos para quitar los tornillos y pernos rotos



Los extractores de tornillo son especialmente utilizados en los departamentos de mantenimiento, talleres mecánicos, y automotrices, para extraer un tornillo roto siga el procedimiento.

- Taladre un agujero en la rotura del tornillo usando el diámetro de broca recomendada en la tabla anterior.
- Inserte el extractor de tornillos adecuado en el agujero y girelo hacia la izquierda auxiliado con un maneral sobre el cuadro del extractor.
- El extractor se adhiere a la pared del agujero hecha en el tornillo roto y al girarlo, el tornillo sale sin dañar la rosca.
- En algunos caso es recomendable la ayuda de un lubricante para eliminar el óxido o corrosión entre la cuerda y el tornillo roto.



BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS

Buril Cuadrado

Lista 850,855 Buril Cuadrado Mo-Max

BROCAS

Lista 850 Mo-Max® HSS

CARACTERISTICAS

ESPECIFICACIONES ANSI

A.A.V.

USO GENERAL

BISEL 10°

APLICACIONES

ACERO ALEADO

HIERRO FUNDIDO

ACERO GRADO HERRAMIENTA



Lista 850 Mo-Max® HSS

RIMAS

Lista 855 Mo-Max® Cobalto

CARACTERISTICAS

ESPECIFICACIONES ANSI

M42

USO GENERAL

BISEL 10°

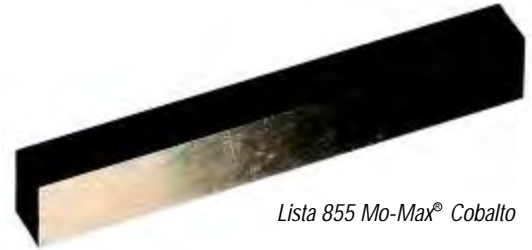
APLICACIONES

ACERO ALEADO

HIERRO FUNDIDO

ACERO GRADO HERRAMIENTA

ACERO INOXIDABLE



Lista 855 Mo-Max® Cobalto

MACHUELOS

Ancho Pulg.	Equivalente		Long. Total		Lista 850	Lista 855
	Decimal	mm	Pulg.	mm		
1/8	.1250	3.18	2-1/2	63.50	C44505	C44536
3/16	.1875	4.76	2-1/2	63.50	C44509	C44540
1/4	.2500	6.35	2-1/2	63.50	C44513	C44544
5/16	.3125	7.94	2-1/2	63.50	C44514	C44545
3/8	.3750	9.53	3	76.20	C44516	C44547
7/16	.4375	11.11	3-1/2	88.90	C44518	C44549
1/2	.5000	12.70	4	101.60	C44520	C44551
5/8	.6250	15.88	4-1/2	114.30	C44522	C44553
3/4	.7500	19.05	5	127.00	C44525	C44556
7/8	.8750	22.23	6	152.40	C44527	C44558
1	1.0000	25.40	7	177.80	C44528	C44559
1-1/4	1.2500	31.75	9	228.60	C44530	C44561

CORTADORES



Buril Cuadrado

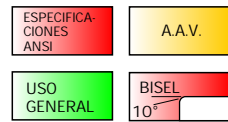
- Los buriles Mo-Max A. A. V. están diseñados para uso general.
- Los buriles Mo-Max al Cobalto están diseñados para materiales mas duros.
- Todos los buriles Mo-Max están biseladas por ambos extremos a 10°.



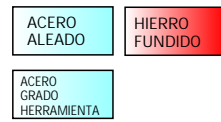
Lista 853,858 Cuchillas para Tronzar para Porta Cuchillas Armstrong and Williams

Lista 853 Mo-Max® HSS

CARACTERISTICAS

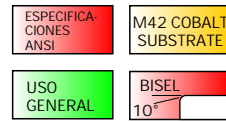


APLICACIONES



Lista 858 Mo-Max® Cobalto

CARACTERISTICAS



APLICACIONES



Ancho Pulgs.	Equivalentes		Altura		Long. Total		Lista 853	Lista 858
	Decimal	mm	Pulgs.	mm	Pulgs.	mm		
3/32	.0938	2.38	1/2	12.70	4-1/2	114.30	C44740	C44741
3/32	.0938	2.38	5/8	15.88	5	127.00	C44742	C44743
1/8	.1250	3.18	3/4	19.05	5	127.00	C44744	C44745
1/8	.1250	3.18	7/8	22.23	6	152.40	C44746	C44747
3/16	.1875	4.76	1	25.40	6-1/2	165.10	C44748	C44749
3/16	.1875	4.80	1-1/8	28.50	7	117.80	C44750	C44751



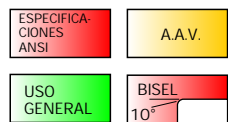
BROCAS

RIMAS

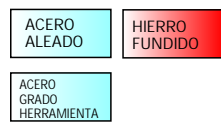
Lista 852,857 Cuchillas para Tronzar

Lista 852 Mo-Max® HSS

CARACTERISTICAS

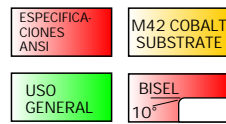


APLICACIONES

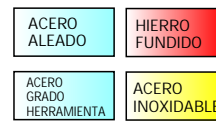


Lista 857 Mo-Max® Cobalto

CARACTERISTICAS



APLICACIONES



Ancho Pulgs.	Equivalentes		Altura		Long. Total		Lista 852	Lista 857
	Decimal	mm	Pulgs.	mm	Pulgs.	mm		
1/16	.0625	1.59	1/2	12.70	4-1/2	114.30	C44701	C44702
1/16	.0625	1.59	11/16	17.46	5	127.00	C44703	C44704
1/16	.0625	1.59	13/16	20.64	6	152.40	C44705	C44706
3/32	.0938	2.38	1/2	12.70	4-1/2	114.30	C44707	C44708
3/32	.0938	2.38	11/16	17.46	5	127.00	C44709	C44710
3/32	.0938	2.38	13/16	20.64	6	152.40	C44711	C44712
3/32	.0938	2.38	1	25.40	6-1/2	165.10	-	C44714
1/8	.1250	3.18	11/16	17.46	5	127.00	C44715	C44716
1/8	.1250	3.18	13/16	20.64	6	152.40	C44717	C44718
1/8	.1250	3.18	1	25.40	6-1/2	165.10	C44719	C44720
5/32	.1562	3.97	13/16	20.64	6	152.40	C44721	C44722
3/16	.1875	4.76	13/16	20.64	6	152.40	C44723	C44724
3/16	.1875	4.76	1	25.40	6-1/2	165.10	C44725	C44726
1/4	.2500	6.35	13/16	20.64	6	152.40	C44729	C44730
1/4	.2500	6.35	1	25.40	6-1/2	165.10	C44731	C44732
5/16	.3125	7.94	1	25.40	6-1/2	165.10	C44733	C44734



MACHUELOS

CORTADORES

OTRAS HERRAMIENTAS

Cuchillas para Tronzar

Lista 859,864 Cuchillas para Tronzar Tipo "T"

BROCAS

Lista 859 Cuchillas para Tronzar Tipo "T" HSS

CARACTERISTICAS

ESPECIFICACIONES ANSI

A.A.V.

USO GENERAL

BISEL 10°

APLICACIONES

ACERO ALEADO

HIERRO FUNDIDO

ACERO GRADO HERRAMIENTA



Lista 859 Cuchilla Tipo "T" HSS

RIMAS

Lista 864 Cuchillas para Tronzar Tipo "T" Cobalto

CARACTERISTICAS

ESPECIFICACIONES ANSI

M42

USO GENERAL

BISEL 10°

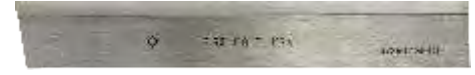
APLICACIONES

ACERO ALEADO

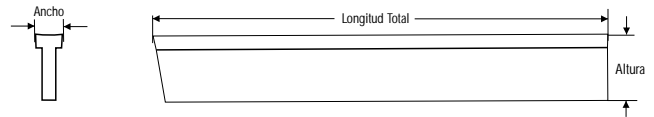
HIERRO FUNDIDO

ACERO GRADO HERRAMIENTA

ACERO INOXIDABLE



Lista 859 Cuchilla Tipo "T" Cobalto



MACHUELOS

Blade Number	Ancho Pulgs.	Equivalente		Altura		Long. Total		Lista 859	Lista 864
		Decimal	mm	Pulgs.	mm	Pulgs.	mm		
PIN	.040	.0400	1.02	1/2	12.70	3-1/2	88.89	C44800	C44819
PI	1/16	.0625	1.59	1/2	12.70	3-1/2	88.89	C44801	C44820
PIX	5/64	.0781	1.98	1/2	1.70	4-1/2	114.30	C44802	C44821
P2	3/32	.0938	2.38	1/2	12.70	4-1/2	114.30	C44803	C44822
P3N	3/32	.0938	2.38	11/16	17.46	5	127.00	C44804	C44823
P3S	1/8	.1250	3.18	1/2	1270	4-1/2	114.30	C44805	C44824
P3	1/8	.1250	3.18	11/16	17.46	5	127.00	C44806	C44825
P3W	1/8	.1250	3.18	3/4	19.05	5	127.00	C44807	C44826
P5X	1/8	.1250	3.18	7/8	22.23	6	152.39	C44808	C44827
P8X	1/8	.1250	3.18	1-1/8	28.58	6-1/2	165.10	C44809	C44828
P4	5/32	.1562	3.97	11/16	17.46	5	127.00	C44810	C44829
P4W	5/32	.1562	3.97	3/4	19.05	5	127.00	C44811	C44830
P5N	5/32	.1562	3.97	7/8	22.23	6	152.39	C44812	C44831
P5S	3/16	.1875	3.97	11/16	17.46	5	127.00	C44813	C44832
P5W	3/16	.1875	3.97	3/4	19.05	6	152.39	C44814	C44833
P5	3/16	.1875	3.97	7/8	22.23	6	152.39	C44815	C44834
P8	3/16	.1875	3.97	1-1/8	28.58	6-1/2	165.10	C44816	C44835
P6	1/4	.2500	6.35	7/8	22.23	6	152.39	C44817	C44836
P9	1/4	.2500	6.35	1-1/8	28.58	6-1/2	165.10	C44818	C44837

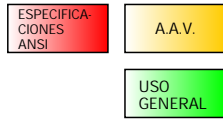
CORTADORES

OTRAS HERRAMIENTAS

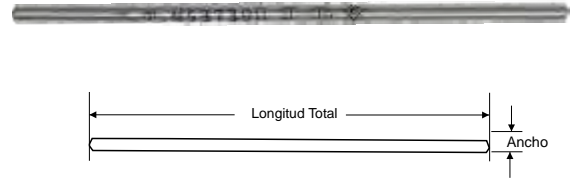


Lista 3558 Buriles Redondos Tipo Gorton

CARACTERISTICAS



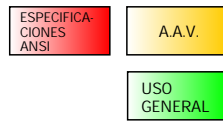
APLICACIONES



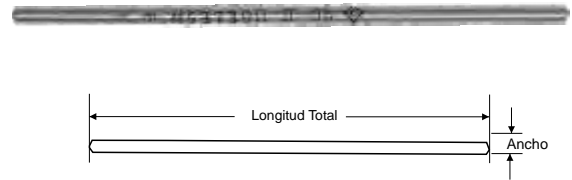
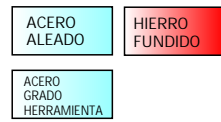
Ancho Pulgs.	Equivalente		Long. Total		Lista 3558
	Decimal	mm	Pulgs.	mm	
1/16	.0625	1.59	4	101.60	3558-0062
1/8	.1250	3.18	4	101.60	3558-0125
5/32	.1562	3.97	4	101.60	3558-0156
3/16	.1875	4.76	4	101.60	3558-0187
1/4	.2500	6.35	4	101.60	3558-0250
5/16	.3125	7.94	4	101.60	3558-0312
3/8	.3750	9.53	4	101.60	3558-0375
7/16	.4375	11.11	4	101.60	3558-0437
1/2	.5000	12.70	4	101.60	3558-0500

Lista 3559 Buriles Redondos Tipo Gorton Milimétricos

CARACTERISTICAS



APLICACIONES



Ancho mm	Equivalente		Long. Total		Lista 3559
	Decimal	Pulgs.	mm		
2.00	.0079	4	101.60		3559-0200
3.00	.0118	4	101.60		3559-0330
3.50	.0138	4	101.60		3559-0350
3.55	.0139	4	101.60		3559-0355
4.00	.0157	4	101.60		3559-0400
4.50	.0177	4	101.60		3559-0450
5.00	.0197	4	101.60		3559-0500
5.50	.0217	4	101.60		3559-0550
6.00	.0236	4	101.60		3559-0600
6.50	.0256	4	101.60		3559-0650
7.00	.0276	4	101.60		3559-0700
7.50	.0295	4	101.60		3559-0750
8.00	.0315	4	101.60		3559-0800
8.50	.0335	4	101.60		3559-0850
9.00	.0354	4	101.60		3559-0900
9.50	.0374	4	101.60		3559-0950
10.00	.0394	4	101.60		3559-1000
11.00	.0433	4	101.60		3559-1100
11.50	.0453	4	101.60		3559-1150
12.00	.0472	4	101.60		3559-1200
12.50	.0492	4	101.60		3559-1250

Buriles Extralargos

Lista 3510 Buriles Extralargos Mo-Max®

BROCAS

CARACTERISTICAS

ESPECIFICACIONES ANSI

A.A.V.

USO GENERAL

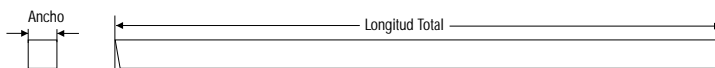
BISEL 10°

APLICACIONES

ACERO ALEADO

HIERRO FUNDIDO

ACERO GRADO HERRAMIENTA



RIMAS

Ancho Pulg.	Equivalente		Long. Total		Lista 3510
	Decimal	mm	Pulg.	mm	
3/16	.1875	4.76	3	76.20	3510-018730
3/16	.1875	4.76	4	101.60	3510-018740
3/16	.1875	4.76	6	152.40	3510-018760
1/4	.2500	6.35	3	76.20	3510-025030
1/4	.2500	6.35	4	101.60	3510-025040
1/4	.2500	6.35	6	152.40	3510-025060
1/4	.2500	6.35	8	203.20	3510-025080
5/16	.3125	7.94	3	76.20	3510-031230
5/16	.3125	7.94	4	101.60	3510-031240
5/16	.3125	7.94	6	152.40	3510-031260
5/16	.3125	7.94	8	203.20	3510-031280
3/8	.3750	9.53	4	101.60	3510-037540
3/8	.3750	9.53	6	152.40	3510-037560
3/8	.3750	9.53	8	203.20	3510-037580
7/16	.4375	11.11	6	152.40	3510-043760
7/16	.4375	11.11	8	203.20	3510-043780
1/2	.5000	12.70	6	152.40	3510-050060
1/2	.5000	12.70	8	203.20	3510-050080
5/8	.6250	15.88	6	152.40	3510-062560
5/8	.6250	15.88	8	203.20	3510-062580
3/4	.7500	19.05	8	203.20	3510-075080
7/8	.8750	22.23	8	203.20	3510-087580
1	1.0000	25.00	10	254.00	3510-100010
1 1/8	1.1250	28.58	10	254.00	3510-112510

MACHUELOS

CORTADORES

Lista 3510 Buriles Extralargos Milimétricos Mo-Max®

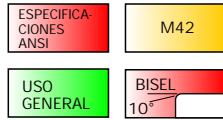
Ancho mm	Equivalente		Long. Total		Lista 3510
	Decimal		Pulg.	mm	
10.00	0.3937		8.874	200.00	3510-1010200
12.00	0.4724		8.874	200.00	3510-1212200

OTRAS HERRAMIENTAS

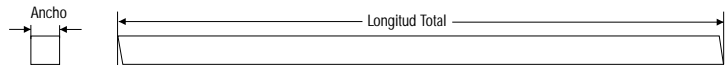


Lista 3515 Buriles Extralargos Mo-Max®

CARACTERISTICAS



APLICACIONES



Ancho Pulg.	Equivalente		Long. Total		Lista 3515
	Decimal	mm	Pulg.	mm	
3/16	.1875	4.76	3	76.20	3515-018730
3/16	.1875	4.76	4	101.60	3515-018740
3/16	.1875	4.76	6	152.40	3515-018760
1/4	.2500	6.35	3	76.20	3515-025030
1/4	.2500	6.35	4	101.60	3515-025040
1/4	.2500	6.35	6	152.40	3515-025060
1/4	.2500	6.35	8	203.20	3515-025080
5/16	.3125	7.94	3	76.20	3515-031230
5/16	.3125	7.94	4	101.60	3515-031240
5/16	.3125	7.94	6	152.40	3515-031260
5/16	.3125	7.94	8	203.20	3515-031280
3/8	.3750	9.53	4	101.60	3515-037540
3/8	.3750	9.53	6	152.40	3515-037560
3/8	.3750	9.53	8	203.20	3515-037580
7/16	.4375	11.11	6	152.40	3515-043760
7/16	.4375	11.11	8	203.20	3515-043780
1/2	.5000	12.70	6	152.40	3515-050060
1/2	.5000	12.70	8	203.20	3515-050080
5/8	.6250	15.88	6	152.40	3515-062560
5/8	.6250	15.88	8	203.20	3515-062580
3/4	.7500	19.05	8	203.20	3515-075080
7/8	.8750	22.23	8	203.20	3515-087580
1	1.0000	25.00	10	254.00	3515-100010
1 1/8	1.1250	28.58	10	254.00	3515-112510

Lista 3515 Buriles Extralargos Milimétricos Mo-Max®

Ancho mm	Equivalente		Long. Total		Lista 3515
	Decimal		Pulg.	mm	
10.00	0.3937		8.874	200.00	3515-1010200
12.00	0.4724		8.874	200.00	3515-1212200

BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS
HERRAMIENTAS

Cortadores Circulares

Lista 305 Cortadores Circulares de Tres Cortes A.A.V.

Medida No.	Ancho de la Cara		Diámetro de Corte		Diámetro de Centro		Dientes	EDP
	Pulg.	mm	Pulg.	mm	Pulg.	mm		
305-16	.2500	6.35	4.00	101.60	1.00	25.40	24	C45064
305-17	.3750	9.53	4.00	101.60	1.00	25.40	24	C45065
305-19	.5000	12.70	4.00	101.60	1.25	31.75	22	C45067
305-31	.7500	19.05	5.00	127.00	1.25	31.75	26	C45078



Lista 307 Cortadores Circulares de Dientes Alternados A.A.V.

Medida No.	Ancho de la Cara		Diámetro de Corte		Diámetro de Centro		Dientes	EDP
	Pulg.	mm	Pulg.	mm	Pulg.	mm		
307-6	.2500	6.35	3.00	76.20	1.00	25.40	16	C45114
307-24	.5000	12.70	6.00	152.40	1.25	31.75	24	C45132



Lista 321 Cortadores Circulares Woodruff Zanco Recto para Cuñero A.A.V.

Medida No.	Ancho de la Cara		Diámetro Nominal		Longitud Total		Dientes	EDP
	Pulg.	mm	Pulg.	mm	Pulg.	mm		
202	.2500	6.35	.063	1.59	2.063	52.39	8	C45481
202-1/2	.3125	7.94	.063	1.59	2.063	52.39	8	C45520
203	.3750	9.53	.063	1.59	2.063	52.39	8	C45482
204	.5000	12.70	.063	1.59	2.063	52.39	10	C45483
302-1/2	.3125	7.94	.094	2.38	2.094	53.18	8	C45521
304	.5000	12.70	.094	2.38	2.094	53.18	10	C45485
305	.6250	15.88	.094	2.38	2.094	53.18	10	C45486
403	.3750	9.53	.125	3.18	2.125	53.98	8	C45487
404	.5000	12.70	.125	3.18	2.125	53.98	10	C45488
405	.6250	15.88	.125	3.18	2.125	53.98	10	C45489
406	.7500	19.05	.125	3.18	2.125	53.98	10	C45490
506	.7500	19.05	.156	3.97	2.156	54.77	10	C45492
605	.6250	15.88	.188	4.76	2.188	55.56	10	C45494
606	.7500	19.05	.188	4.76	2.188	55.56	10	C45495
608	1.0000	25.40	.188	4.76	2.188	55.56	12	C45497
610	1.2500	31.75	.188	4.76	2.188	55.56	14	C45499
806	.7500	19.05	.250	6.35	2.250	57.15	10	C45504
807(121)	.8750	22.23	.250	6.35	2.250	57.15	14	C45505
808(141)	1.0000	25.40	.250	6.35	2.250	57.15	12	C45506
809	1.1250	31.75	.250	6.35	2.250	57.15	14	C45507
810	1.2500	31.75	.250	6.35	2.250	57.15	14	C45508
811	1.3750	34.93	.250	6.35	2.250	57.15	14	C45509
812	1.5000	38.10	.250	6.35	2.250	57.15	14	C45510
1008(131)	1.0000	25.40	.313	7.94	2.313	58.74	12	C45511
1009(161)	1.1500	31.75	.313	7.94	2.313	58.74	14	C45512
1010	1.2500	31.75	.313	7.94	2.313	58.74	14	C45513
1012	1.5000	38.10	.313	7.94	2.313	58.74	14	C45515
1210	0.1250	3.18	.375	9.53	2.375	60.33	14	C45517
1212	1.5000	38.10	.375	9.53	2.375	60.33	14	C45519



Lista 318 Sierra de Acero Alta Velocidad para Ranuras

Medida No.	Ancho de la Cara		Diámetro de Corte		Diámetro de Centro		Dientes	EDP
	Pulg.	mm	Pulg.	mm	Pulg.	mm		
318-79	.0160	0.41	1.75	44.45	.625	15.88	90	C45245
318-75	.0250	0.64	1.75	44.45	.625	15.88	90	C45241
318-72	.0360	0.91	1.75	44.45	.625	15.88	90	C45238
318-67	.0640	1.63	1.75	44.45	.625	15.88	90	C45233
318-61	.0360	0.91	2.25	57.15	.625	15.88	60	C45227
318-25	.0100	0.25	2.75	69.85	1.000	25.40	72	C45215
318-24	.0130	0.33	2.75	69.85	1.000	25.40	72	C45214
318-20	.0200	0.51	2.75	69.85	1.000	25.40	72	C45210
318-18	.0250	0.64	2.75	69.85	1.000	25.40	72	C45208
318-17	.0280	0.71	2.75	69.85	1.000	25.40	72	C45207
318-16	.0320	0.81	2.75	69.85	1.000	25.40	72	C45206
318-14	.0400	1.02	2.75	69.85	1.000	25.40	72	C45204
318-13	.0450	1.14	2.75	69.85	1.000	25.40	72	C45203
318-12	.0510	1.30	2.75	69.85	1.000	25.40	72	C45202
318-11	.0570	1.45	2.75	69.85	1.000	25.40	72	C45201
318-10	.0640	1.63	2.75	69.85	1.000	25.40	72	C45200
318-9909	.0720	1.83	2.75	69.85	1.000	25.40	56	C45308
318-8	.0810	2.06	2.75	69.85	1.000	25.40	72	C45198
318-7	.0910	2.31	2.75	69.85	1.000	25.40	72	C45197
318-6	.1020	2.59	2.75	69.85	1.000	25.40	72	C45196
318-4	.1280	3.25	2.75	69.85	1.000	25.40	72	C45194



Lista 326 Sierra de Acero Alta Velocidad para Ranuras y Corte de Materiales

Medida No.	Ancho de la Cara		Diámetro de Corte		Diámetro de Centro		Dientes	EDP
	Pulg.	mm	Pulg.	mm	Pulg.	mm		
326-9002	.0625	.59	1.25	31.75	.500	12.70	28	C45523
326-9011	.0312	.79	2.00	50.80	.500	12.70	38	C45532
326-6	.0312	.79	3.00	76.20	1.000	25.40	36	C45542
326-7	.0469	1.19	3.00	76.20	1.000	25.40	36	C45543
326-8	.0625	1.59	3.00	76.20	1.000	25.40	36	C45544
326-9	.0938	2.38	3.00	76.20	1.000	25.40	36	C45545
326-10	.1250	3.18	3.00	76.20	1.000	25.40	36	C45546
326-11	.1562	3.97	3.00	76.20	1.000	25.40	36	C45547
326-12	.0312	.79	4.00	101.60	1.000	25.40	40	C45548
326-13	.0469	1.19	4.00	101.60	1.000	25.40	40	C45549
326-14	.0625	1.59	4.00	101.60	1.000	25.40	40	C45550
326-15	.0938	2.38	4.00	101.60	1.000	25.40	40	C45551
326-16	.1250	3.18	4.00	101.60	1.000	25.40	40	C45552
326-19	.0625	1.59	5.00	127.00	1.000	25.40	44	C45555
326-20	.0938	2.38	5.00	127.00	1.000	25.40	44	C45556
326-21	.1250	3.18	5.00	127.00	1.000	25.40	44	C45557
326-22	.1250	3.18	5.00	127.00	1.250	31.75	44	C45558
326-25	.0625	1.59	6.00	152.40	1.000	25.40	48	C45559
326-26	.0938	2.38	6.00	152.40	1.000	25.40	48	C45560



Nota: Empaque por unidad

VELOCIDADES PARA BROCA DE ACERO ALTA VELOCIDAD

	P.S.M.	M.P.M.
Acero Aleado de 300 y 400 Brinell	20-30	6-9
Acero Inoxidable	30-40	9-12
Piezas Forjadas de Acero	40-50	12-15
Acero de Herramienta 1.2 C	50-60	15-18
Acero 4C a .5C	70-80	21-24
Acero Maquinaria Suave, .2 a .3C	80-110	24-33
Hierro Fundido Endurecido	30-40	9-12
Hierro Fundido Semi Duro	70-100	21-30
Hierro Fundido Blando	100-150	30-45
Hierro Maleable	80-90	24-27
Metal Monel	40-50	12-15
Bronce Alta Resistencia	70-150	21-45
Bronce o Latón Ordinarios	200-300	60-90
Aluminio y sus Aleaciones	200-300	60-90
Magnesio y sus Aleaciones	250-400	75-120
Piedra, Mármol. Pizarra	15-25	4.5-7.5
baquelita y Material Similar	100-150	30-45
Madera	300-400	90-120

VELOCIDADES PARA TALADRO

La velocidad de una broca se mide tomando en consideración la velocidad periférica a que se desplaza la parte externa de la herramienta en relación con el trabajo a efectuar. Normalmente se utiliza el cálculo en pies por minuto o sea pies superficiales por minuto, se abrevia P.S.M. o bien en metros por minuto que se abrevia M.P.M.

Las revoluciones por minuto o R.P.M. se indican por las siguientes fórmulas;

$$P.S.M. = .26 \times R.P.M. \times (\text{Diám. broca en mm})$$

$$R.P.M. = 3.8 \times \frac{P.S.M.}{\text{Diámetro de Broca en Pulgadas}}$$

$$M.P.M. = .00314 \times R.P.M. \times (\text{Diám. broca en mm})$$

$$R.P.M. = 318 \times \frac{M.P.M.}{\text{Diámetro de Broca en mm}}$$



Tabla de Velocidades de Corte
(Brocas en Fracciones de Pulgada y mms)

Mts. Min.	Mts. Min.	9	12	15	18	21	24	27	30	33	37	40	43	46	
Diám. mm	Diám. Pulgs.	Revoluciones por Minuto													
1.6	1/16	1833	2445	3056	3667	4278	4889	5500	6111	6722	7334	7945	8556	9167	
3.2	1/8	917	1222	1528	1833	2139	2445	2750	3056	3361	3667	3973	4278	4584	
4.8	3/16	611	815	1019	1222	1426	1630	1833	2037	2241	2445	2648	2852	3056	
6.3	1/4	458	611	764	917	1070	1222	1375	1528	1681	1833	1986	2139	2292	
7.9	5/16	367	489	611	733	856	978	1100	1222	1345	1467	1589	1711	1833	
9.5	3/8	306	407	509	611	713	815	917	1019	1120	1222	1324	1426	1528	
11.1	7/16	262	349	437	524	611	698	786	873	960	1048	1135	1222	1310	
12.7	1/2	229	306	382	458	535	611	688	764	840	917	993	1070	1146	
15.9	5/8	163	244	306	367	428	489	550	611	672	733	794	856	917	
19.0	3/4	153	203	255	306	357	407	458	509	560	611	662	713	764	
22.2	7/8	131	175	218	262	306	349	393	436	480	524	568	611	655	
25.4	1	115	153	191	229	267	306	344	382	420	458	497	535	573	
28.6	1-1/8	102	136	170	204	238	272	306	340	373	407	441	475	509	
31.7	1-1/4	92	122	153	183	214	244	275	306	336	367	397	428	458	
34.9	1-3/8	83	111	139	167	194	222	250	278	306	333	361	389	417	
38.1	1-1/2	76	102	127	153	176	204	229	255	280	306	331	357	382	
41.3	1-5/8	70	94	117	141	165	188	212	235	259	282	306	329	353	
44.4	1-3/4	65	87	109	131	153	175	196	218	240	262	284	306	327	
47.6	1-7/8	61	81	102	122	143	163	183	204	224	244	265	285	306	
50.8	2	57	76	95	115	134	153	172	191	210	229	248	267	287	
57.1	2-1/4	51	68	85	102	119	136	153	170	187	204	221	238	255	
63.5	2-1/2	46	61	76	92	107	122	137	153	168	183	199	214	229	
69.8	2-3/4	42	56	69	83	97	111	125	139	153	167	181	194	208	
76.2	3	38	51	64	76	89	102	115	127	140	153	166	178	191	

BROCAS

RIMAS

MACHUELOS

CORTADORES

OTRAS
HERRAMIENTAS

Información Técnica

Tabla de Velocidades de Corte
(Brocas Numéricas)

Mts. Min.	9	12	15	18	21	24	27	30	33	37	40	43	46
No. Med.	Revoluciones por Minuto												
1	503	670	838	1005	1173	1340	1508	1675	1843	2010	2179	2346	2513
2	518	691	864	1037	1210	1382	1555	1728	1901	2074	2247	2420	2593
3	538	717	897	1076	1255	1434	1614	1793	1974	2152	2331	2511	2690
4	548	731	914	1097	1280	1462	1645	1828	2010	2193	2376	2560	2741
5	558	744	930	1115	1301	1487	1673	1859	2045	2230	2416	2602	2788
6	562	749	936	1123	1310	1498	1685	1872	2060	2247	2434	2624	2809
7	570	760	950	1140	1330	1520	1710	1900	2090	2281	2470	2660	2850
8	576	768	960	1151	1343	1535	1727	1919	2411	2303	2495	2687	2879
9	585	780	975	1169	1364	1559	1754	1949	2144	2339	2534	2728	2923
10	592	790	987	1184	1382	1579	1777	1974	2171	2369	2566	2764	2961
11	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3001
12	606	808	1010	1213	1415	1617	1819	2021	2223	2425	2627	2829	3032
13	620	826	1032	1239	1450	1652	1859	2064	2271	2479	2684	2891	3097
14	630	840	1050	1259	1469	1679	1889	2099	2309	2518	2728	2938	3148
15	638	851	1064	1276	1489	1702	1914	2127	2334	2546	2759	2971	3183
16	647	863	1079	1295	1511	1726	1942	2158	2374	2590	2806	3021	3237
17	662	883	1104	1325	1546	1766	1987	2208	2429	2650	2870	3091	3313
18	678	904	1130	1356	1582	1808	2034	2260	2479	2704	2930	3155	3380
19	690	920	1151	1381	1611	1841	2071	2301	2531	2761	2991	3222	3453
20	712	949	1186	1423	1660	1898	2135	2372	2610	2847	3084	3322	3559
21	721	961	1210	1441	1681	1922	2162	2402	2644	2883	3123	3363	3604
22	730	973	1217	1460	1703	1946	2190	2433	2676	2920	3164	3406	3649
23	744	992	1240	1488	1736	1984	2232	2480	2728	2976	3224	3472	3720
24	754	1005	1257	1508	1759	2010	2262	2513	2764	3016	3267	3518	3769
25	757	1022	1276	1533	1789	2044	2300	2555	2810	3066	3322	3577	3832
26	779	1039	1299	1559	1819	2078	2338	2598	2858	3118	3378	3638	3898
27	796	1061	1327	1592	1857	2122	2388	2653	2919	3183	3448	3714	3979
28	816	1088	1360	1631	1903	2175	2447	2719	2990	3262	3534	3806	4078
29	843	1124	1405	1685	1966	2247	2528	2809	3090	3370	3651	3932	4213
30	892	1189	1487	1784	2081	2378	2676	2973	3270	3567	3864	4162	4459
31	955	1273	1592	1910	2228	2546	2865	3183	3510	3821	4138	4456	4775
32	988	1317	1647	1976	2305	2634	2964	3293	3622	3951	4281	4610	4939
33	1014	1352	1690	2028	2366	2704	3042	3380	3718	4056	4394	4732	5070
34	1032	1376	1721	2065	2409	2753	3097	3442	3785	4129	4474	4818	5162
35	1042	1389	1736	2093	2430	2778	3125	3472	3821	4167	4514	4861	5209
36	1076	1435	1794	2152	2511	2870	3228	3587	3945	4304	4663	5021	5380
37	1102	1469	1837	2204	2571	2938	3306	3673	4040	4407	4775	5142	5509
38	1129	1505	1882	2258	2634	3010	3387	3763	4140	4516	4892	5269	5645
39	1154	1536	1920	2303	2687	3071	3455	3839	4222	4607	4991	5374	5758
40	1169	1559	1949	2339	2729	3118	3508	3898	4287	4677	5067	5457	5846
41	1194	1592	1990	2387	2785	3183	3581	3979	4377	4775	5172	5570	5968
42	1226	1634	2043	2451	2860	3268	3677	4085	4494	4902	5311	5719	6126
43	1288	1717	2146	2575	3004	3434	3863	4292	4721	5150	5579	6008	6438
44	1333	1777	2221	2665	3109	3554	3999	4442	4886	5330	5774	6218	6662
45	1379	1863	2329	2795	3261	3726	4192	4658	5124	5590	6056	6522	6987
46	1415	1886	2358	2830	3301	3773	4244	4716	5187	5659	6130	6602	7074
47	1460	1946	2433	2920	3406	3893	4379	4966	5352	5839	6326	6812	7299
48	1508	2010	2513	3016	3518	4021	4523	5026	5528	6031	6534	7036	7539
49	1570	2093	2617	3140	3663	4186	4710	5233	5756	6279	6808	7326	7849
50	1637	2183	2729	3274	3820	4366	4911	5457	6002	6548	7094	7640	8185
51	1710	2280	2851	3421	3991	4561	5131	5701	6271	6841	7413	7982	8552
52	1805	2406	3008	3609	4211	4812	5414	6015	6619	7218	7820	8421	9023
53	1924	2566	3207	3848	4490	5131	5773	6414	7062	7704	8346	8988	9630
54	2084	2778	3473	4167	4862	5556	6251	6945	7639	8334	9028	9723	10417
55	2204	2938	3673	4408	5142	5877	6611	7346	8080	8815	9549	10284	11028
56	2465	3286	4108	4929	5751	6572	7394	8215	9036	9857	10678	11500	12322
57	2671	3561	4452	5342	6232	7122	8013	8903	9771	10660	11548	12436	13325
58	2729	3637	4547	5456	6367	7275	8186	9095	10004	10913	11823	12732	13642
59	2795	3726	4658	5590	6521	7453	8388	9316	10248	11180	12111	13043	13975

Continúa en la siguiente página



Tabla de Velocidades de Corte
Brocas Numéricas, (Continuación)

Mts. Min.	9	12	15	18	21	24	27	30	33	37	40	43	46
No. Med.	Revoluciones por Minuto												
60	2865	3820	4775	5729	6684	7639	8594	9549	10504	11459	12414	13369	14324
61	2938	3918	4897	5876	6856	7835	8815	9794	10774	11753	12732	13712	14691
62	3015	4020	5025	6030	7035	8040	9045	10050	11057	12060	13068	14073	15078
63	3096	4128	5160	6192	7224	8256	9288	10320	11366	12398	13421	14453	15485
64	3183	4244	5305	6366	7427	8488	9549	10610	11671	12732	13793	14845	15915
65	3273	4364	5455	6546	7637	8728	9819	10910	12005	13096	14187	15279	16370
66	3474	4632	5790	6948	8106	9264	10422	11580	12732	13890	15047	16205	17362
67	3582	4776	5970	7146	8358	9552	10746	11940	13130	14324	15517	16712	17905
68	3696	4928	6160	7392	8624	9856	11088	12320	13554	14786	16018	17250	18482
69	3916	5224	6530	7836	9142	10488	11754	13060	14389	15697	17006	18314	19622
70	4091	5456	6820	8184	9548	10912	12276	13640	15006	16370	17734	19099	20463
71	4419	5892	7365	8838	10311	11784	13257	14730	16160	17629	19099	20568	22037
72	4584	6112	7640	9168	10696	12224	13752	15280	16807	18335	19863	21390	22918
73	4776	6368	7960	9552	11144	12736	14328	15920	17507	19099	20690	22282	23873
74	5106	6808	8510	10212	11914	13616	15318	17020	18674	20372	22069	23767	25465
75	5457	7276	9095	10914	12733	14552	16371	18190	20008	21827	23646	25465	27284
76	5730	7640	9550	11460	13370	15280	17190	19100	21008	22918	24828	26738	28648
77	6366	8488	10610	12732	14854	16976	19098	21220	23343	25465	27587	29709	31831
78	7161	9548	11935	14322	16709	19096	21483	23870	26260	28648	31035	33422	35810
79	7902	10536	13170	15804	18438	21072	23706	26340	28988	31611	34246	36880	39514
80	8490	11320	14150	16980	19810	22640	25470	28300	31123	33953	36782	39612	42441

Tabla de Velocidades de Corte
(Brocas Alfabéticas)

Mts. Min.	9	12	15	18	21	24	27	30	33	37	40	43	46
No. Med.	Revoluciones por Minuto												
A	491	654	818	982	1145	1309	1472	1636	1796	1959	2122	2285	2448
B	482	642	803	963	1124	1284	1445	1605	1765	1926	2086	2247	2407
C	473	631	789	947	1105	1262	1420	1578	1736	1894	2052	2210	2368
D	467	622	778	934	1089	1245	1400	1556	1708	1863	2018	2174	2329
E	458	611	764	917	1070	1222	1375	1528	1681	1834	1988	2139	2292
F	446	594	743	892	1040	1189	1337	1486	1635	1784	1932	2081	2229
G	440	585	732	878	1024	1170	1317	1463	1610	1756	1903	2049	2195
H	430	574	718	862	1005	1149	1292	1436	1580	1723	1867	2010	2154
I	421	562	702	842	983	1123	1264	1404	1545	1685	1826	1966	2106
J	414	552	690	827	965	1103	1241	1379	1517	1655	1793	1930	2068
K	408	544	680	815	951	1087	1223	1359	1495	1631	1767	1903	2039
L	395	527	659	790	922	1054	1185	1317	1449	1581	1712	1844	1976
M	389	518	648	777	907	1036	1165	1295	1424	1554	1683	1813	1942
N	380	506	633	759	886	1012	1139	1265	1391	1518	1644	1771	1897
O	363	484	605	725	846	967	1088	1209	1330	1450	1571	1692	1813
P	356	473	592	710	828	946	1065	1183	1301	1419	1537	1657	1774
Q	345	460	575	690	805	920	1035	1150	1266	1384	1496	1611	1726
R	338	451	564	676	789	902	1014	1127	1239	1355	1465	1577	1690
S	329	439	549	659	769	878	988	1098	1207	1317	1427	1537	1646
T	320	426	533	640	746	853	959	1066	1173	1280	1387	1494	1600
U	311	415	519	623	727	830	934	1038	1142	1246	1349	1453	1557
V	304	405	507	608	709	810	912	1013	1114	1219	1317	1418	1520
W	297	396	495	594	693	792	891	989	1088	1188	1286	1385	1484
X	289	385	481	576	672	769	865	962	1058	1155	1251	1347	1443
Y	284	378	473	567	662	756	851	945	1040	1135	1229	1324	1418
Z	277	370	462	555	647	740	832	925	1017	1110	1202	1295	1387



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